INWOOD'S TABLES OF INTEREST & MORTALITY FOR THE PURCHASING OF ESTATES AND VALUATION OF PROPERTIES

Sir William Schooling R.B.E.

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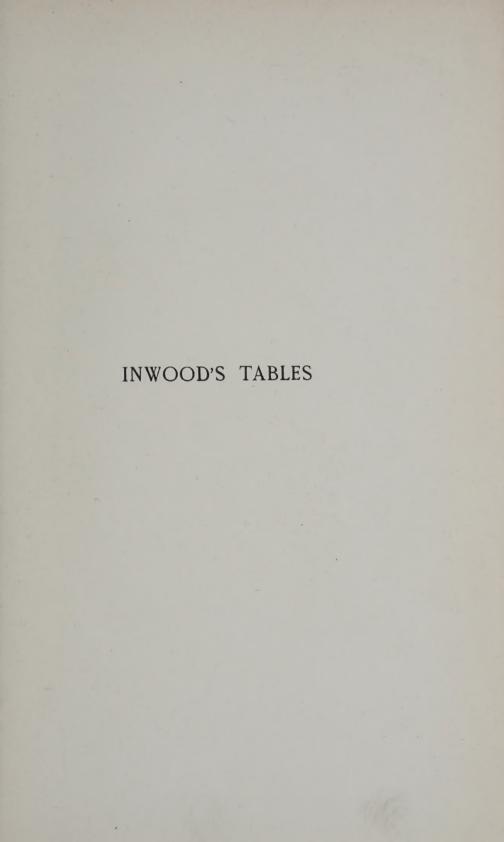


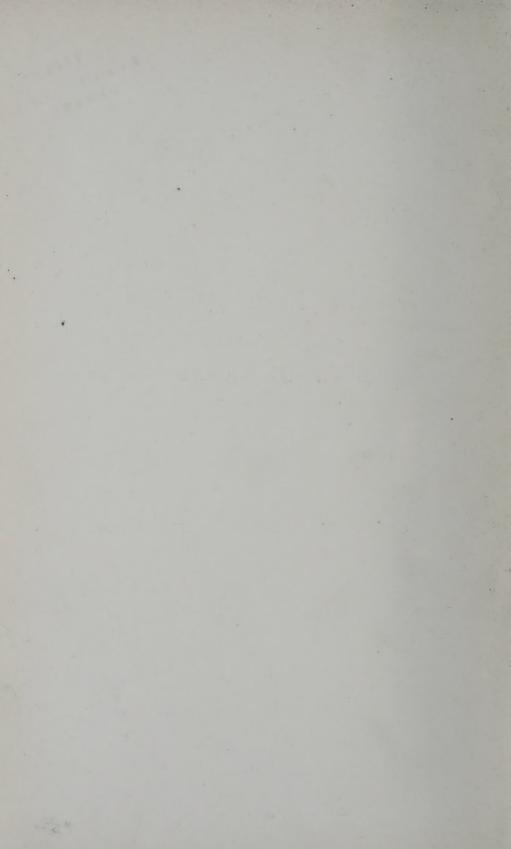
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Inwood's

TABLES OF INTEREST AND MORTALITY

FOR THE

PURCHASING OF ESTATES AND VALUATION OF PROPERTIES

INCLUDING

LOGARITHMS OF NATURAL NUMBERS AND LOGARITHMIC INTEREST AND ANNUITY TABLES.

Thirty=Second Edition

REVISED AND GREATLY EXTENDED

 $\mathbf{B}\mathbf{Y}$

SIR WILLIAM SCHOOLING, K.B.E.



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PREFACE

TO THE

THIRTY-SECOND EDITION

So far as I am aware, the first edition of "Inwood's Tables" was published in 1811. The sixth edition, of which I have a copy, was published in 1832. The book was revised and extended from time to time, and was entirely reset in more convenient form for the twenty-fifth edition. Since then new Tables have been added from time to time.

In the present edition extensive alterations and additions have been made. Many of the old Tables are now given at additional rates of interest, and the value of the Mortality Tables has been greatly increased by the inclusion of the British Offices Mortality Table, compiled under the direction of the Institute of Actuaries.

For the permission to include Tables based upon the Healthy Males and the British Offices Tables of Mortality, I am greatly indebted to the Council of the Institute of Actuaries, who have generously given permission for the use in this volume of their valuable copyrights.

There are three definitely new features in the present edition. They are the Moneylenders' Table on pp. 210-216, the Simple Interest Tables on pp. 218-251, and the Logarithmic Tables of Compound Interest on pp. 362-411. Something may be said about each of these features.

The Moneylenders' Tables give for rates of interest varying from twenty to three hundred per cent. per annum, the amount and the present value of £1 and of £1 per annum, together with the annual, half-yearly, quarterly, monthly, and weekly payments to discharge a debt of one hundred pounds and the interest upon it. In the introduction on pp. 25-28 the method of calculating the interest on loans, and of finding the rate of interest that is being charged, are described.

Almost invariably when the reports of Law cases in connection with moneylending give sufficient detail to enable the rate of interest to be calculated, it is found that the rate of interest which the moneylender is alleged to charge is greatly understated, and it seems desirable that the material for correct calculation should be made available.

The conduct of moneylending transactions is to some extent regulated by Act of Parliament, and it would appear desirable that while moneylenders should be left free to charge any rate of interest that borrowers consent to pay, they should be required to state the rate of interest which they charge. Few people have any idea of what that rate of interest really is. This is especially the case when a borrower makes default in payments, and the immediate repayment of the balance of the debt is demanded. A moneylender might be allowed to state the penalty to be inflicted for default, but he could with advantage be required to state the higher rate of interest that should be paid in the event of default being made.

The second principal feature of this new edition is the Tables of Simple Interest on pp. 218-249. The interest is here given at 5 per cent. per annum for every day from one to three hundred and sixty-five, and for every £100 from £100 to £10,000. In the introduction on pp. 29-31, it is explained how simple interest at any rate whatever can be found from these Tables.

Particular attention may perhaps be called to the facility with which simple interest can be calculated by means of logarithms as explained on pp. 67, 68, and with the help of the logarithmic tables on pp. 412-414.

The third principal new feature of the present edition is the extension and rearrangement of Thoman's Logarithmic Tables of the amount of £1 and of the annuity that I will purchase. These Tables formerly gave on one page the logarithms of these functions at one rate of interest for each year from I to 100. In this edition the logarithms of the functions are given for fifty-eight rates of interest for two years on a page. For some purposes this is a more convenient arrangement, and particularly so for ascertaining the rate of interest yielded by an annuity certain. The method of finding this rate of interest is described on

BRITISH OFFICES' TABLE OF MORTALITY

I much regret that, through inadvertence, I did not seek, previous to publication, the permission of the Faculty of Actuaries to use the British Offices' Tables. In view of this oversight, I am the more grateful to the Council of the Faculty for most kindly allowing the Tables to appear.



PREFACE TO THE THIRTY-SECOND EDITION

pp. 69-71, from which it will be seen that from these tables the rate of interest can be determined to within one farthing

per cent. per annum, or even less.

On pp. 72-80 the construction of loan repayment schedules is explained in some detail. Experience shows that many of those who construct, or check, such schedules, adopt methods which, on the one hand, involve an unnecessary amount of trouble, and on the other, are calculated to produce errors in the working.

The use of logarithms, particularly in connection with compound interest calculations, is explained in considerable detail on pp. 51-80. In these days when calculating machines are in very general use, there seems to be an impression that logarithms have in large measure been superseded. This, in my judgment, is a great mistake, and involves much unnecessary trouble in making calculations. So far from calculating machines having superseded logarithms, they have made the use of logarithms quite exceptionally simple and expeditious.

For this edition the size of the page and the number of pages have been increased, about 120 pages of new matter

having been introduced.

The greatest care has been taken to insure accuracy, but with such a large number of figures it is not easy to prevent mistakes. Consequently, if any user of the Tables finds a single error, I should be grateful if he would send a note of it to the publishers.

For the large number of calculations required for the preparation of this edition, and for much careful revision of the proofs, I have to thank Mr Borrajo, A.I.A., and several other ladies and gentlemen on the staff of the Prudential Assurance Company, who have kindly devoted some of their spare time to this work.

WILLIAM SCHOOLING.

9 ELVASTON PLACE, S.W. 7, July 1924.



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ON THE NATURE AND USE OF DECIMALS

In order to render the following tables intelligible to persons only moderately acquainted with common arithmetic it may be well to give a brief explanation of decimals, since most of the tables here given involve their use.

Our entire system of numbering (if for the moment we leave fractions out of consideration) is, in fact, the decimal system, which means literally a system of tens, for if any number consist of a single figure—say, 6—we call that number six—that is, six units or six ones but if another figure—a 4, for instance—stand before it, making the number 46, we do not call this 4 four ones, but four tens, and thus regard the number as forty-six. In like manner if another figure—3, for instance—be prefixed making the number 346, we regard this 3 not as three ones, nor as three tens, but as three hundreds. way we give to every figure in a number ten times the value the same figure would have if it were moved one place more to the right; so that the value of a figure depends upon its position. When we are dealing with whole numbers the figure occupying the first place on the right denotes so many ones, the next figure so many tens, the next so many hundreds, and so on. This tenfold increase of value which every advance towards the left gives to a figure is properly called the decimal system of notation.

Now what are more particularly called *decimals* are numbers that are less than unity, and they are dealt with on exactly the same principle as numbers that are more than unity, a decimal dot being placed to indicate what numbers are more than unity and what numbers are less than unity. Whether we are dealing with numbers greater or less than unity the value of a figure is ten times as much as the value of the same figure placed next to it on the right-hand side and one tenth as much as the value of the same figure placed

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next to it on the left-hand side. It is, therefore, just as simple to deal with decimals as it is to deal with whole numbers.

If we see a number, such as 346, without any decimal dot we understand, as explained above, that the 6 stands for six ones, but if between the four and the six we place a decimal dot, 34.6, we then know that the four no longer stands for four tens, but for four ones, and the 6 no longer stands for six ones, but for six tenths of one. So if we write 3.46 the 3 no longer stands for three hundreds, but for three ones, the 4 for four tenths of one, and the 6 for six hundredths of one. The decimal dot, therefore, is simply employed to tell us where the ones come, for the figure immediately to the left of the decimal dot always stands for so many ones. If these uniform gradations by tens and tenths are kept in mind no difficulty will arise in dealing with the decimals.

Decimals and Fractions

From this it will be seen that any decimal may be converted into its equivalent fraction at once: we have only to write the decimal, removing the dot, for numerator, and to write for denominator I followed by as many cyphers as there are figures, or *places*, in the decimal. Thus:

$$0.6 = \frac{6}{10}$$
; $0.6 = \frac{6}{100}$; $0.06 = \frac{6}{1000}$; $0.42 = \frac{42}{100}$; $0.423 = \frac{423}{1000}$

and so on.

Every fraction too of which the denominator I is followed by cyphers may just as readily be written as a decimal, thus

$$\frac{3}{10}$$
 = 3; $\frac{7}{100}$ = 07; $\frac{9}{1000}$ = 009; $\frac{2463}{100}$ = 24.63, &c.

We have only to write down the numerator and to point off from the right as many decimal places as there are cyphers in the denominator, supplying this necessary number of places by cyphers immediately after the decimal point, should the number of figures in the numerator be too few.

Fractions, whatever be their denominators, may also be converted into decimals, as will be seen presently.

Addition of Decimals

From what has been already said it will be seen that the important thing in the addition of decimals is to take care that the decimal dots all come under one another, just as in the addition of whole

USE OF DECIMALS

numbers the units have to come under the units, the tens under the tens, and so on. If this point is attended to the matter is perfectly simple, and is conducted exactly like simple addition. A few examples are given below:—

- 1. Add together 2.345, .64, 23.7, .02.
- 2. 7.432, 16.207, .021, .4628.
- 3. '005, 61'4, '368, 7'2.

(1)	(2)	(3)
2.342	7.432	.002
·64	16.502	61.4
23.7	°02 I	·368
·02	·4628	7.2
26.705	24.1558	68.973

Subtraction of Decimals

In subtracting decimals, as in adding them, the important thing is to see that the decimal dots come under one another, and if this is done the subtraction of decimals is carried out in exactly the same way as simple subtraction. A few examples of subtraction are also given:—

- 1. Subtract 3.725 from 5.103.
- 2. 27.846 from 31.3.
- 3. '026 from 12'4.

(1)	(2)	(3)
5.103	31.3	12.4
3.725	27.846	.026
T:258	0:454	T0:274
1.348	3.454	12.374

In the third example of addition two cyphers appear immediately to the right of the decimal dot. These o's serve to indicate the *position*, and therefore the *value*, of the figure to the right of them; thus '005 indicates that there are no tenths nor hundredths, and that the five stands for five thousandths; and similarly in the third example of subtraction '026 indicates that there are no tenths, but that the 2 stands for two hundredths and the 6 for six thousandths.

Multiplication of Decimals

It will have already been seen that we multiply a number involving decimals by 10 by simply removing the decimal point one place to

the right; we multiply by 100 by removing the point two places to the right, and so on. Thus:

In order to multiply a number containing decimals by any whole number—that is, by any number without decimals—we proceed exactly as we should do if there were no decimals at all; only when the product is obtained we must point off, as decimals, as many places as there are places pointed off in the number multiplied. Thus, if we have to multiply 24.623 by 47, we proceed as in the margin, and so in all similar cases. As the number multiplied has three decimal places, we mark off three places of decimals in the product.

In order to multiply any whole number—we proceed exactly as we proceed exactly as we proceed exactly as we must point off, as decimals, as many places as there are places pointed off in the number 17.2361 as we proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals—we proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we should do if there were no decimals at all; only when the proceed exactly as we have a subject to the proceed exactly as we have a subject to the proceed exactly as we have a subject to th

If we have to multiply together two numbers which both contain decimals we proceed as in simple multiplication, and place the decimal dot in the answer in such a position that the number of decimals is the same in the answer as in the two numbers when their decimal places are added together. Thus:

$$1.2 \times 1.1 = 1.35$$
; $.033 \times .55 = .0144$;

Division of Decimals

In dividing a number containing decimals by a whole number we place the decimal dot in the quotient as soon as we bring down a decimal of the dividend. Thus to divide 27'344 by 4 we proceed as follows:—

After dividing 27 by 4 we come to the decimal '3, and so the decimal dot had to be placed between the 6 and 8 of the quotient.

If we have to divide by a number that will not go into the decimal part of the dividend we must be careful to record the fact by putting a cypher in the quotient.

Thus $372 \div 4$ gives

4) $372 \div 6$ and $372 \div 6$ and 372

USE OF DECIMALS

The values of the 9 and the 3 depend on their position, and they must be put in their right place by prefixing cyphers to the left of them if necessary. Placing cyphers to the right of a decimal dot alters the value of the numbers on the right of the cyphers. Placing cyphers to the right of a decimal number with no other number after the cyphers makes no difference in its value. Thus:

$$73 = \frac{73}{100}$$
; $073 = \frac{73}{1000}$; $0073 = \frac{73}{10000}$; $0730 = \frac{730}{1000}$ or $\frac{73}{100}$;

These facts have to be borne in mind in the division of decimals. We may add as many cyphers as we please to the right of a decimal number, and so carry our division as far as we choose. Thus $4\cdot 3 \div 7$ may just as well be called $4\cdot 30000 \div 7$. It makes no difference in the value, but there is no need actually to write the cyphers in working out the sum. We may put

and the result is the same. The benefit of proceeding in this way is that we may get an answer that is more nearly correct than if we left off at the last figure of the dividend. Thus the result of $4\cdot 3 \div 7$ is approximately $\frac{6}{10}$, more nearly $\frac{614}{1000}$, still more nearly $\frac{614}{1000}$, and so on.

If both the divisor and the dividend contain decimals there must be as many decimal places in the divisor and quotient together as there are in the dividend. This is obvious from what has been said in regard to multiplication. It was there shown that $^{222} \times 3^{1} = 6882$, and so if we have to divide 6882 by 222 we have

There are three decimal places in the divisor '222, and four in the dividend '6882, so there must be one in the quotient 3'1 to add to the three in the divisor to make up the four in the dividend.

In applying this rule it must be borne in mind that the number of decimal places in the dividend means the number actually used in division, and the number of cyphers added to it ranks as decimal places. Thus 8.973÷24=37.3 or 37.38 or 37.387 or 37.3875, as we may see.

There are one, or two, or three, or four places of decimals in the answer, depending upon the extent to which we carry the division. Obviously the answer cannot sometimes be 37.3 (i.e. 37.3), sometimes 3.73 (i.e. 3.73), and so on: it must always be 37 and a little more. Hence the number of decimal places used in the dividend have to be noted, and the number in the quotient added to those in the divisor must make up the number used in the dividend.

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USE OF DECIMALS

For most of the purposes for which the tables in this book are likely to be used, four or five places of decimals are amply sufficient, and it is unnecessary to carry the calculations any further.

Fractions and Decimals

We have already shown how readily decimals may be converted into fractions, and we must now show how fractions may be converted into decimals. We saw that a decimal may be thought of as a fraction with the decimal as numerator, and for denominator I followed by as many cyphers as there are decimal places in the decimal. Thus $I = \frac{I}{IO}$; $I = \frac{2}{IO}$, and so on. Now it is obvious we do not alter the value of any fraction if we multiply both the numerator and denominator by the same quantity. Thus $I = \frac{2}{4} = \frac{4}{8} = \frac{8}{16} = \frac{16}{32}$, and so on. All these fractions are of the same value.

If, therefore, we multiply the denominator by a quantity that makes it equal to 10 or 100, or any other multiple of 10, and then multiply the numerator by the same quantity as we multiplied the denominator by, we at once get a fraction that can be converted into a decimal at sight.

Thus

$$\frac{1}{2} = \frac{5}{10} = \frac{5}{5}$$

$$\frac{1}{4} = \frac{25}{100} = \frac{25}{25}$$

$$\frac{2}{5} = \frac{4}{10} = \frac{4}{5}$$

It is often, however, a clumsy way of working to divide 10 or some power of 10 by the denominator, and then multiply the numerator by the result. To do so may involve a long multiplication sum. We therefore multiply the numerator by 1 followed by any number of cyphers we want and divide by the denominator. In other words, we divide the numerator by the denominator. Thus in converting $\frac{2}{5}$ into a decimal it makes no difference in the result whether we have $\frac{2 \times 10 \div 5}{5 \times 10 \div 5} = \frac{2 \times 2}{5 \times 2} = \frac{4}{10} = 4$, or whether we have $\frac{2 \cdot 0}{5} = 4$.

But it makes a great deal of difference in the working whether in converting, say, $\frac{1868}{3736}$ into a decimal we first divide 1 by 3736 and

multiply the result by 1868, or whether we divide 1868 by 3736 and get 5 as our answer at once.

A few examples of converting fractions into decimals are appended.

$$\frac{1}{2}$$
 = '5; $\frac{1}{4}$ = '25; $\frac{3}{4}$ = '75; $\frac{1}{8}$ = '125; $\frac{1}{3}$ = '3; $\frac{2}{3}$ = '6.

These are useful fractions of which to know the corresponding decimals. A recurring decimal is marked with a dot above it, and means that it is repeated continuously. Where a group of several figures recurs it is marked with a dot over the first and last of the group. Thus $\frac{1}{3}$ = '33333 and as many more threes as we care to

write. It is shortly expressed as $\dot{3}$. If we wish to convert $\frac{1}{7}$ into a decimal, we have

which means that at this stage there is 1 over, and the numbers 142857 would be repeated indefinitely if the division were continued for an indefinitely long time. Other examples are:—

$$4\frac{3}{8} = 4.375$$
; $7\frac{9}{16} = 7.5625$; $\frac{17}{21} = .809523$; $\frac{14}{373} = .0375335 + .$

COMPOUND INTEREST TABLES

On pp. 82-216 Compound Interest Tables of various kinds are given. Their construction and use is here explained, in order to facilitate their employment, and to show how to make calculations at other rates and for other periods than those given in the tables.

Unless otherwise stated the tables throughout the book are calculated at compound interest, not at simple interest.

It will be convenient to give the explanations by quite simple algebra first, and then to give the arithmetical explanations or numerical examples.

To begin with the most usual symbols employed are stated.

NOTATION

Notation and Formulæ

Interest

P=The Principal or Capital; or the Present Value.

s=The amount to which that Principal will accumulate; or the Sum due.

n =The Number of years.

i =The Interest on 1 for 1 year.

v = The Present Value of 1 due a year hence.

d =The Discount on 1 for 1 year.

 $(1+i)^n$ = The amount of 1 due at the end of n years.

 v^n = The Present Value of 1 due at the end of n years.

 $S_{\overline{n}|} = \frac{(\mathbf{I} + i)^n - \mathbf{I}}{i} = \text{The amount of } \mathbf{I} \text{ per annum immediately}$ after the n^m payment.

 $\frac{\mathbf{I}}{\mathbf{S}_{\overline{n}|}} = \frac{i}{(\mathbf{I} + i)^n - 1} = \text{The Sinking Fund payment which will amount}$ to I at the end of *n* years.

 $a_{n|} = \frac{1 - v^n}{i}$ = The Present Value of 1 per annum due at end of n years.

 $\frac{\mathbf{I}}{a_{\overline{n}|}} = \frac{\mathbf{I}}{S_{\overline{n}|}} + i = \text{The Annuity for } n \text{ years which } \mathbf{I} \text{ will purchase, } i.e.,$

the Annual Payment which will repay a debt of \mathbf{r} and the interest upon it in n years.

Life Assurance and Life Annuities

- l_x =The number living at age x according to the Mortality Table.
- d_x = The number dying between age x and age x + 1.
- p_x = The probability that a life age x will survive τ year.
- q_x = The probability that a life age x will die within 1 year.
- a_x = An Annuity of 1, first payment at the end of a year, to continue during the life of x.
- $A_x = I d(I + a_x)$ = The Single Premium to assure I at the end of the year of the death of x.
- $P_x = \frac{A_x}{I + a_x} = \frac{I}{I + a_x} d = \text{The Annual Premium to assure I at}$ the end of the year of the death of x,

The Amount of \pounds I

On pp. 106-164 are tables which show for various rates of interest:—

- (1) The sum which £1 will amount to in any number of years from 1 to 100.
- (2) The present value of £1 due at the end of any number of years from 1 to 100.
- (3) The sum to which £1 per annum will amount in any number of years from 1 to 100.
- (4) The present value of £1 per annum to be received for any number of years.

We will consider these in the order stated, taking our illustrations principally from the 4 $^{\circ}/_{\circ}$ table on pp. 130 and 131.

If by i we represent the rate of interest, it is clear that one pound, or one dollar, or any other unit, will amount in one year to 1+i; and if we represent the amount by P, we have P=1+i. If the rate of interest is $4^{\circ}/_{\circ}$, or 4 on one hundred, it is '04 on a unit and 1+i=1'04.

At the beginning of the second year, if the interest has not been paid, the loan or investment, P, is 1+i, = 1°04, and the interest on this is i (1+i), = 1°04 × °04 = °0416. To find the amount at the end of the second year we must add the second year's interest to the amount at the beginning of the second year. Thus we have $(1+i)+i(1+i)=(1+i)\times(1+i)$ = $(1+i)^2$, or 1°04 + (°04 × 1°04) = 1°04 + °0416 = 1°0816 = 1°04 × 1°04 = 1°04².

Thus the amount of one in any number of years, n, is the amount of one in one year raised to the n^{th} power. This is expressed as $(1+i)^n$, and, if i=0.4, then $(1+i)^n=1.04^n$. If n=5 this is 1.04^5 . This may be seen below.

	Amount at Beginn	ing	
Year	of Year	Process	Amount at End of Year
I	I	× 1.04 = 1.04	= 1.04
2	1'04	\times 1.04 = 1.045	2= i.0819
3	1,0819	\times 1.04 = 1.04	3=1.134864
4	1°124864	× 1.04 = 1.04	= 1.16982826
5	1.16982826	x 1.04 = 1.04	5 = 1.5166253054

This tells us the amount of I, and, if we want to know what any other sum comes to, we must multiply the sum by the amount of I.

What is the amount of £17 in five years at 4 $^{\circ}/_{\circ}$?

PRESENT VALUE OF £1

The amount of
$$\pounds_1$$
 is 1.21665
The amount of 17
is therefore $\underbrace{\pounds_{20.68305}}$

We might get this more nearly exact by using more places of decimals. Thus, $1.2166529024 \times 17 = 20.6830993408$, which is 0.000493408 more than we previously had. The difference is less than $\frac{5}{100000}$ of £1, which is $\frac{1}{1000}$ of a shilling, or almost $\frac{1}{20}$ of a farthing. This shows that five places of decimals, as given in the tables, give results quite near enough for most purposes.

It is explained later on (pp. 60-61) how easily a table of this kind can be constructed by means of logarithms the practical use of which is extremely simple, and if other rates of interest than those tabulated are needed they should be obtained by logarithms.

It should be noted that the table gives the amount of one pound at the *end* of the year, *i.e.* just after the year's interest has been added. The amount at the *beginning* of any year is the same as the amount at the end of the preceding year. Before explaining some of the uses of these tables it will be best to explain the contents of the other columns on these pages.

We at present assume that the interest is reckoned annually, but later on we shall consider the case of interest convertible half-yearly and at other intervals.

The Present Value of £1

If, as we have seen, £1 amounts to £1'04 in one year the present value of this £1'04 is obviously £1. In other words, £1 invested now at 4% will amount to £1'04 in one year. But if the present value of £1'04 = 1 the present value of $1 = \frac{1}{1.04}$, and using v to represent the present value of 1 one year

hence we have $v = \frac{1}{1+i}$, and $v^n = \frac{1}{(1+i)^n}$, where, as before, n represents the term. If i = 04 and n = 5 we have

$$v^5 = \frac{1}{(1+i)^5} = \frac{1}{1.21665} = .82193.$$

Whatever the term may be

$$v = \frac{1}{1+i}$$

$$1+i = \frac{1}{v}$$

$$v(1+i) = 1$$
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Thus to take 10 years at 4 %

$$\frac{1}{1+i} = \frac{1}{1.48024} = .67556 = v$$

$$1+i = 1.48024 = \frac{1}{.67556} = \frac{1}{v}$$

$$v(1+i) = 1.48024 \times .67556 = .999999$$

By calculating the values of i and v to more places of decimals we may obtain as close an approximation as we please to v by multiplying v by (v + i).

To find the present value of any other sum than 1 we multiply the sum by the present value of 1 for the number of years required. Thus, the present value of £83 due at the end of 10 years at 4% is $^{67556} \times ^{83} = £56.07148$. It will be noticed that the table of present values, like the table of amounts, refers to the *end* of the year. For finding v^n by logarithms see p. 61.

The Amount of £1 per Annum

The third table on each page (106-164) gives the amount of \mathcal{L}_{I} per annum immediately after each annual payment is made. Thus the first line is in all cases 1'00000. This table may be found from the amount of \mathcal{L}_{I} by a series of additions. Thus at $4^{\circ}/_{\circ}$, if to the initial payment of \mathcal{L}_{I} we add 1'04000, the amount of \mathcal{L}_{I} in one year, we obtain 2'04000, which is the amount of \mathcal{L}_{I} per annum immediately after the second annual payment has been made. If to this amount we add 1'08160, the amount of \mathcal{L}_{I} at the end of the second year, we obtain \mathcal{L}_{3} '12160, the amount of \mathcal{L}_{I} per annum immediately after the third annual payment has been made.

We can, however, obtain the result in another way. The amount of £1 in ten years at $4^{\circ}/_{\circ}$ is 1.48024, of which amount 1 was the original payment and .48024 the accumulated interest. Now £1 yields .04 every year at interest at $4^{\circ}/_{\circ}$, therefore the amount of .04 per annum for 10 years is .48024. But if .04 per annum amounts to .48024 in 10 years, .01 per annum will amount to one-fourth of this sum, which is .12006, and 1 amounts to 100 times this sum, which is .12006, which we see to be the amount of £1 per annum in 10 years. Hence it follows that we can obtain the amount of £1 per annum by subtracting unity from the amount of £1 and dividing the result by the rate of interest. Hence we get the following expression:

$$s_{n} = \frac{(1+i)^{n}-1}{i},$$

where s_{n} is the amount of \mathcal{L}_{1} per annum in n years, i is the rate of interest, and $(1 + i)^{n}$ is the amount of \mathcal{L}_{1} in n years.

PRESENT VALUE OF £1 PER ANNUM

To find the amount of any other sum for any number of years we take from the table the amount of $\pounds r$ per annum at the rate of interest and for the number of years required, and multiply this amount by the sum with which we have to deal. Thus the amount of £75 per annum for 30 years at $4^{\circ}/_{\circ} = £56.08494$ (p. 130) × 75 = £4206.3705.

The Present Value of £1 per Annum

By similar reasoning we see that the present value of £1 per annum may be obtained from the present value of £1—that is to say, by a series of additions the present value of £1 per annum can be obtained from the present value of £1. It may also be obtained by a second method similar to the second method of finding the amount of £1 per annum from the amount of £1. Thus the present value of £1 at the end of 10 years is 67556, and the difference between this amount and unity is 32444, which is the present value of o4 per annum for 10 years. The value of o1 per annum is one fourth of this amount, which is 08111. The present value of 1 per annum is 100 times this amount, viz. $8^{\circ}111$, which is seen (p. 130) to be the present value of £1 per annum for 10 years at $4^{\circ}0$.

It will be noticed that the present value of \mathcal{L}_{I} per annum for 10 years is stated to be 8.11090, not 8.111. This slight discrepancy is due to the fact that the present value of \mathcal{L}_{I} is only given to five places of decimals. If we calculate the present value of \mathcal{L}_{I} due at the end of 10 years at 4% to six places of decimals instead of five we find that it comes to 675564. Subtracting this amount from unity we obtain 324436, which divided by 4 and multiplied by 100 gives us 8.11090 as the present value of \mathcal{L}_{I} per annum for 10 years, which is in accordance with the table.

This relation between the present value of \mathcal{L}_{I} and \mathcal{L}_{I} per annum may be expressed by the formula

$$a_{\overline{n}} = \frac{1 - v^n}{i}$$

where a_{n} is the present value of \mathcal{L}_{1} per annum for n years, v^{n} is the present value of 1 due at the end of n years, and i is the rate of interest.

Tables of the present value of £1 per annum are given not only on pp. 106-164, but also in an abbreviated form on pp. 82-97.

See also the logarithmic tables of $\frac{1}{a_{nl}}$ (pp. 362 – 411 and p. 62).

The table giving the present value of \mathcal{L}_{I} per annum is applicable to many different purposes. Thus if we want to know the present value of an annuity, or pension for a definite number of years—the

value, that is to say, of what is called an 'annuity certain,' or the value of a lease, or of any other property yielding a fixed and certain yearly income, we can readily obtain it from this table. Thus a lease, or annuity, yielding £1 per annum, with 25 years to run, if purchased for £15.62208, would yield the purchaser $4^{\circ}/_{\circ}$ on his money and replace the capital by the end of 25 years. If the annuity were £10 a year its value would be ten times as much; if £20 a

year, twenty times as much, and so on.

In the tables for the purchasing of leases, &c., on pp. 82-97, the present value of annuities is stated as so many years' purchase. The values are there given for half-years. The values are arrived at somewhat differently for the integral and the half-years. For the latter an annuity of one half is taken for twice the number of years at half the rate of interest. Thus on p. 85 the year's purchase of 1 for 20½ years at 3°/. is stated as 15'229. On p. 110 the annuity for 41 years at 1½°/. is given as 30'45896. The half of this is 15'229 as on p. 85 for 20½ years at 3°/. The effective rate for the half-years at a nominal 3°/. is 3'0225°/. as shown on p. 207. The effective rate for the integral years is 3°/.

The Annuity £1 will Purchase

This is the reciprocal of the present value of 1 per annum. At $4^{\circ}/_{\circ}$ the present value of 1 per annum for 25 years is 15.62208 (p. 130). Clearly, if 15.62208 buys 1 per annum, 1 will buy $1 \div 15.62208 = 0.64012$.

The annuity that I will buy suffices to pay interest on the purchase price and to accumulate to that price at the end of the

term. Thus at 4°/,—

1 buys '064012 per annum for 25 years.

Less '04 for interest on 1.

Balance '024012 per annum for 25 years.

This sum at $4^{\circ}/_{\circ}$ amounts to (p. 130) $41.64591 \times .024012 = 1$.

In other words, the annuity that I will purchase is the annual payment that will redeem a debt and pay the interest upon it by

the end of the term for which the annuity is payable.

The difference between the Sinking Fund payment (see p. 17) and the annuity I will purchase is that the latter does, and the former does not provide for interest on capital. Thus at 4°/s for 25 years—

The Sinking Fund is '064012 per annum.

The sinking Fund is '024012 (p. 182).

The interest is '04

The logarithms of the annuity 1 will purchase are given in much detail on pp. 362-411. See also p. 62.

Present Value of Reversions

On pp. 165-170 and 98-105 we have the present value of a reversion to a perpetuity of £1. On p. 206 we have the present value

PRESENT VALUE OF REVERSIONS

of a perpetuity to be entered upon immediately, and on pp. 106-164 and 82-97 we have the present value of an annuity for any number of years from 1 to 100. By subtracting the present value of an annuity for a certain number of years from the present value of a perpetuity we obtain the present value of a perpetuity deferred for that certain number of years. Thus we see that the present value of a perpetuity of £1 per annum at $4^{\circ}/_{\circ}$ is £25 (p. 206). The present value of an annuity of £1 per annum for 20 years at $4^{\circ}/_{\circ}$ is £13.59033 (p. 130). Deducting this amount from £25, we have £11.40967 as the present value of the reversion after 20 years of a perpetuity of £1, the amount given on pp. 168 and 102. The value of the reversion to a perpetuity may also be obtained by dividing the present value of 1 by the rate of interest. At $4^{\circ}/_{\circ}$ (p. 130) $\frac{v^{20}}{i} = 45639 \div 04 = 11.40975$.

Commutation of Fines for Renewing Estates

Estates held in perpetuity are sometimes subject to a renewal fine to be paid by the holder at regular specified intervals. These periodical fines may be compounded for by a single payment down. The first table on p. 171 shows what this payment ought to be, so that the holder of the estate may redeem all these continually recurring fines and at the same time be allowed such interest upon the money thus paid in advance as may be agreed upon. Thus if the renewal fine is payable every 7 years for ever then the redemption money to bear 5 % interest is found by the table to be 2:4564. This means that £2.4564 must be paid to redeem a fine of £1 payable every 7 years. To redeem a fine that is equivalent to one year's rent a sum equal to 2.4564 times the annual rent must be paid. It is obvious that the redemption money must be that sum the interest upon which, if allowed to accumulate at compound interest at the rate agreed upon for the period between the fines, will just suffice to pay the fine. A reference to p. 138 shows that the amount of £1 for 7 years is £1.40710. Deducting from this amount the original \mathcal{L}_{I} invested, we see that the interest on \mathcal{L}_{I} invested for 7 years is £.40710. If now we multiply 40710 by 2.4564, the amount required to redeem a fine of £1 payable every 7 years, reckoning interest at 5 $^{\circ}$ /_s, we have $^{\cdot}40710 \times 2^{\cdot}4564 = 1$. Thus it will be seen that in every 7 years the interest on the redemption money amounts to exactly enough to pay the fine.

Renewal of any Number of Years Expired in a Lease

The second table on p. 171 and the tables on pp. 172-175 show the number of years' purchase for the renewal of any number of years

expired in leases of various length. A reference to p. 130 shows that the present value of £1 per annum for 10 years is £8.11090, and on p. 171 we see that the amount to be paid for the renewal of a 10 years' lease is this same sum of £8.11090, which may be read as either £8.11090 for every £1 of income annually derived from the lease, or as 8.11090 years' purchase of the annual income from the lease. But if we own a lease that has, say, 5 years to run and we want to convert it into a lease that has 10 years to run, it is obvious that we must pay something for the extension of the lease. Reckoning interest at 4°/, we have just seen that the value of a lease for 10 years is 8.11090 times its annual value, and another reference to p. 130 shows that the value of the 5 years' lease we at present possess is £4.45182 for every £1 of annual income; in other words, the value of the 5 years' lease we hold is 4'45182 times the annual value of the lease. Deducting this value of the 5 years' lease we own from the total value of the 10 years' lease we wish to obtain, we have 3.65908 as the number of years' purchase to be paid for extending our 5-year lease into a 10-year lease.

We could obtain the same result from the table on p. 130, showing the present value of \mathcal{L}_{I} instead of the present value of \mathcal{L}_{I} per annum. We are obviously entitled to the benefit of the lease for the next 5 years, and the additional benefit we have to pay for by having the lease extended to 10 years is equivalent to the present value of

£1 due at the end of 6 years =
$$\frac{£}{79031}$$
£1 ,, ,, 7 ,, = $\frac{.75992}{.5992}$
£1 ,, ,, 8 ,, = $\frac{.73069}{.5992}$
£1 ,, ,, 10 ,, = $\frac{.67556}{.5997}$

This gives us £3.65907 as the present value of £1 per annum for the 6th to the 10th years, or 3.65907 years' purchase of the annual value of the lease, and is the same result as we obtained before, except that the last figure is a 7 instead of an 8, which is due to the number of decimal places to which the calculations were carried not being sufficient to produce identical results.

The tables referring to the renewals of any number of years in leases for 20, 21, and 40 years are calculated in the same way, and the renewal of leases for different times, or at other rates of interest than those given on pp. 171–175, may be readily calculated from the present value of £1 per annum given on pp. 106–164 by subtracting the present value of £1 per annum for the number of years the lease we own has to run from the present value of £1 per annum for

the number of years for which the fresh lease will be granted. It will be noticed that the last column in the table dealing with the 10 years' lease is headed 17.95°/.; in the 20 years' lease 12.304°/.; in the 21 years' lease 11.564°/.; and in the 40 years' lease 8°/.

These rates of interest are respectively equivalent to a fine of I year's rent every 4, 7, 7, and 14 years. The extraordinary rates of interest here referred to result from customs that must presumably have originated from ignorance of the real rates of interest involved.

Sinking Fund

On pp. 176-185 is given the annual amount to be set aside and invested in order to replace the capital at the end of the selected period. This table is obtained by dividing unity by the amount of £1 per annum, as given on pp. 106-164. Thus, comparing the amount of £1 per annum at $4^{\circ}/_{\circ}$, as given on p. 130, divided into unity with the Sinking Fund in the $4^{\circ}/_{\circ}$ column on p. 182, we have for

```
Year I, I ÷ I 00000 = 100000;

,, I0, I ÷ I200611 = 083291;

,, 20, I ÷ 2900000 = 100000;

,, 30, I ÷ 5600000 = 1000000;
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This may be stated the other way about, and we may say that £.083291 per annum accumulated for ten years at $4^{\circ}/_{\circ}$ amounts to £1, or $.083291 \times 12.00611 = 1$.

In this table no provision is made for paying interest on the capital. If this has to be done the amounts given in the sinking fund table must be increased each year by the interest on £1. Thus to repay £1 in ten years, and to pay interest annually at $4^{\circ}/_{\circ}$, needs an annual payment of .083291 + .04 = .123291. Of this amount .04 pays the interest each year, and .083291 accumulated at $4^{\circ}/_{\circ}$ replaces the original £1 invested.

If we take '123291 and accumulate it at $4^{\circ}/_{\circ}$, we find that in ten years it amounts to '123291 × 12'00611 = 1'48024, which, from p. 130, we find is the amount to which £1 amounts in ten years at $4^{\circ}/_{\circ}$ if the interest on it is allowed to accumulate instead of being drawn annually.

In using this table care must be taken to notice whether the purpose for which it is required calls for interest on the original investment to be paid annually or not. See the section on logarithms, especially pp. 65 and 62.

If the purchaser of a leasehold property wishes to set aside out of the net rent received sufficient to replace the purchase price by the time the lease expires, the table must be used as it stands, the

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difference between the net rent and the sinking fund constituting the interest on the purchase price of the lease.

If, on the other hand, a loan has to be repaid, say, in 10 years, with interest at 4°/o, either the interest on the loan must be paid annually, in addition to the sinking fund as given in the table, or '04 must be added to the sinking fund for every £1 borrowed, and allowed to accumulate with it.

If the interest is at $1^{\circ}/_{\circ}$ there must be an addition of 'o1 to the annual sinking fund for every \mathcal{L}_{1} borrowed; if at $2^{\circ}/_{\circ}$ an addition of 'o2; if at $5^{\circ}/_{\circ}$, of 'o5; if at $10^{\circ}/_{\circ}$, of '1; and so on.

The annuity that 1 will purchase is the same thing as the sinking fund payment plus the annual interest on the debt (see pp. 14 and 362-411).

Value of Annuity to Yield Interest on Capital at One Rate, and Replace Capital at a Lower Rate

On pp. 186–204 are given the annual payments required to pay interest at comparatively high rates, and to replace the capital by a sinking fund accumulating at a lower rate. From p. 180 we learn that £.087231 per annum at 3°/ $_{\circ}$ for 10 years will amount to £1. But if we have to pay 5°/ $_{\circ}$ per annum upon the £1 we must add £.05 to the sinking fund payment of £.087231. These two amounts come to £.137231, and would suffice, if paid annually for 10 years, to pay 5°/ $_{\circ}$ per annum on the original loan of £1, and to replace the £1 by accumulation at 3°/ $_{\circ}$. The present value of this annuity of £.137231 on these terms as to interest is therefore obviously £1. But if the value of an annuity of £.137231 is £1, the value of an annuity of £1 is $\frac{1}{137231} = 7.287$, which, on reference to p. 192, we

see to be the value of an annuity of \mathcal{L}_{I} yielding interest on capital at 5 $^{\circ}/_{\circ}$, and replacing capital when invested at 3 $^{\circ}/_{\circ}$.

These terms are very onerous to the borrower, since he has to pay interest at a high rate on the whole capital for the whole term, although by the accumulation of the sinking fund the capital may be rightly considered as partly repaid.

These tables may be readily extended to other periods and rates of interest by taking the reciprocal of the amount obtained by adding to the sinking fund payment the annual interest on the loan. The reciprocal of a number is obtained by dividing unity by the number.

The value of an annuity of any other amount than £1 per annum is obtained by multiplying the figures in the table by the amount of the annuity. See also the logarithmic tables and p. 65.

PRESENT VALUE OF A PERPETUITY

Yield per cent. and Years' Purchase

The percentage per annum which each number of years' purchase of a perpetuity yields to a purchaser is obtained by dividing 100 by the number of years' purchase. The results are given on p. 205.

The Present Value of a Perpetuity

On p. 206 is given the present value of a perpetuity of £1 per annum from $\frac{1}{8}$ °/ $_{\circ}$ up to 10°/ $_{\circ}$. These results are obtained by dividing 100 by the rate per cent. From this table the value of freehold property, advowsons, &c., can be obtained, it of course being necessary to ascertain the net annual value of the property on which to base the price to be paid for it. Thus a freehold yielding £80 per annum, after deduction of all expenses connected with it, would yield 4°/ $_{\circ}$, if purchased for £2,000, for 25 × 80 = 2,000. If the same property were purchased for £1,800, which is at the rate of £22. 10s. (for 1,800 ÷80 = 22.5) for each £1 per annum, the yield upon the capital invested would be between $4\frac{3}{8}$ and $4\frac{1}{2}$ °/ $_{\circ}$.

The rate of interest per cent. may be found without reference to the table. We have only to divide 100 times the amount of the perpetuity by the purchase price, or present value. Thus, in the above example:—

$$80 \times 100 \div 1,800 = \frac{80}{18} = \frac{40}{9} = £4.4 = £4.8 \text{s. } 11d. \text{ per cent.}$$

See also pp. 416 and 64.

Nominal and Effective Rates of Interest

On pp. 207-208 is a table comparing nominal and effective rates of interest. This subject is a somewhat intricate one, but the main principles underlying it may be grasped without much difficulty. Hitherto we have been considering that the rate of interest was calculated annually. We now have to deal with the case of interest calculated half-yearly, quarterly, and monthly. Suppose the nominal rate to be $4^{\circ}/_{\circ}$ per annum; it will obviously be $2^{\circ}/_{\circ}$ for 6 months, and at the end of the first half-year an original investment of £1 will amount to £1'02. For the second half-year interest at the rate of $2^{\circ}/_{\circ}$ for every 6 months is now earned upon £1'02 instead of upon only £1. This brings the amount of the original investment at the end of the second half-year to £1'0404 instead of to only £1'04, which is the amount it would have been if the interest

had been calculated annually instead of half-yearly. A reference to p. 114 will show that this is the amount that £,1 amounts to in 2 years at 2°/. Hence we see that if we want to calculate interest at more frequent intervals than I year we can divide the nominal rate of interest by the number of periods (at which interest is to be calculated) that are contained in a year, and take the interest for this number of years at the resulting rate of interest. In other words, we see that instead of talking about years we can talk about periods, and if we want to talk about interest that is nominally 4°/, per annum, but really 2°/, for 6 months, or if convertible quarterly, 1°/, for 3 months, we may turn to a 2°/, table and look at the result after 2 periods and a 1 % table to find the result after 4 periods. Thus on p. 106 we see that £1 accumulated for 4 periods at 1°/ amounts to £,1.0406, the interest per cent. being £,4.06, which is the effective annual rate when interest is convertible quarterly, shown on p. 207 as corresponding to a nominal annual rate of 4°/. The same thing holds if interest is convertible monthly. The amount of £ i accumulated for 12 periods, whatever their length, at $\frac{1}{2}$ % per period, would amount to £,1.061678, and 6.1678 is shown on p. 207 to be the effective annual rate per cent. when interest is convertible monthly, if the nominal rate is 6°/, per annum. The table on p. 208 is the converse of the upper. If the real or effective rate is 4°/, per annum the nominal annual rate, when interest is convertible half-yearly, is ± 3.9608 , or 1.9804 per half-year. Thus f, 1 for 6 months at 1.9804 per 6 months amounts to £1.019804. During a second period of 6 months this amount at the same rate of interest earns £.020196, which added to the £1.019804 makes up £1.04, which is equivalent to the amount of f, at an effective annual rate of f, The higher the rate of interest and the more frequently the interest is convertible, the greater is the difference between the effective and the nominal rates.

Annuities Payable Half-yearly, Quarterly, and Monthly

If we are entitled to receive an annuity of $\mathfrak{L}\mathfrak{I}$ per annum, payable yearly, but, instead of receiving it annually, receive it every 6 months, we obviously receive the amount of the half-yearly payment sooner than we are entitled to; and if that half-yearly payment were invested for 6 months, the 2 half-yearly payments, together with this 6 months' interest on one of them, would amount to more than the annual payment to which we are entitled supposing the half-yearly payments were exactly half the yearly payment. That is to say, if the annuity to which we are entitled annually is divided into 2, or

4, or 12 equal parts, and paid half-yearly, quarterly, or monthly, its capital value is greater than if the annuity were paid annually. As a concrete instance of this we have, on p. 209, the value of an annuity of £1 per annum for 25 years at $4^{\circ}/_{\circ}$. If the annuity is payable annually and the interest convertible annually, the present value of the annuity is £15.62208, which is the figure given for its value on p. 130, as also on p. 209. To find the value of an annuity of 10s. every 6 months for 25 years at $4^{\circ}/_{\circ}$ we multiply £15.62208 by 1.0099, the factor given in the upper table on p. 209. This gives us 15.77677 as the value of an annuity of 10s. every 6 months for 25 years, reckoning interest at $4^{\circ}/_{\circ}$ per annum.

Similarly an annuity of \mathcal{L}_{I} per annum payable quarterly—that is, 5s. every 3 months—is worth 15.62208 × 1.01488, or \mathcal{L}_{I} 5.85449. The value of an annuity payable monthly is calculated on similar principles, the constant factor by which to multiply the value of the

annuity payable yearly being 1.0182.

If the interest is convertible half-yearly, and the annuity payable half-yearly, we can obtain the value of the annuity from the tables on pp. 106–164, by considering that we have an annuity of one-half per period for 50 periods at $2^{\circ}/_{\circ}$ instead of an annuity of 1 for 25 periods at $4^{\circ}/_{\circ}$. A reference to p. 114 shows us that the present value of £1 per annum for 50 periods is £31.42361, the half of which is £15.71180, which is the value given in the middle table on p. 209 for an annuity payable half-yearly when the interest is convertible half-yearly. Similarly an annuity of 5s. every 3 months at $4^{\circ}/_{\circ}$ per annum convertible quarterly, which is $1^{\circ}/_{\circ}$ every 3 months, is $\frac{1}{4}$ of £63.02888, which on p. 107 is seen to be the amount of £1 per annum for 100 periods at $1^{\circ}/_{\circ}$. Now £63.02888 \div 4 = £15.75722, which on p. 209 is seen to be the value of an annuity for 25 years at $4^{\circ}/_{\circ}$ payable quarterly, with interest convertible quarterly.

Present Value and Discount

The bottom table on p. 209 gives to 9 places of decimals the present value of £1 due one year hence, which has already been given to fewer places of decimals on pp. 106-164, and explained on p. 11. The discount is given for more rates of interest, but fewer places of decimals, on pp. 250 and 251. No further explanation is necessary here, but for some purposes it is convenient to have these items calculated with greater approach to accuracy.

Extension of Tables

If interest functions are required for longer periods than are tabulated, they can be calculated without much trouble. The most convenient way of doing this is by logarithms (see pp. 60 sqq.), but it can also be done as follows:—

The Amount of $\pounds \mathbf{I} = (\mathbf{I} + \mathbf{I})^n$

To find the amount of \mathcal{L}_{I} at the end of n+m years, multiply the amount for n years by the amount for m years.

$$(1+i)^{n+m} = (1+i)^n \times (1+i)^m$$

 $1.03^{130} = 1.03^{100} \times 1.03^{30}$
 $= 19.21863 \times 2.42726 \text{ (pp. 122, 123)}$
 $= 46.6486.$

The Present Value of $\pounds I = V^n$

To find the present value of \mathcal{L}_{I} due at the end of n+m years, multiply the present value for n years by the present value for m years.

$$v^{n+m} = v^{n} \times v^{m}$$

$$\frac{1}{1 \cdot 03^{130}} = \frac{1}{1 \cdot 03^{100}} \times \frac{1}{1 \cdot 03^{30}}$$
= '05203 × '41199 (pp. 122, 123)
= '02144.

The Amount of $\mathcal{L}_{\mathbf{I}}$ per Annum = $S_{\mathbf{n}}$

To find the amount of $\mathbf{1}$ per annum for n+m years, multiply the amount of $\mathbf{1}$ per annum for n years by the amount of $\mathbf{1}$ for m years, and add the amount of $\mathbf{1}$ per annum for m years.

$$S_{\overline{n+m}|} = S_{\overline{n}|} \times (\mathbf{I} + i)^{m} + S_{\overline{m}|}$$

$$= \frac{(\mathbf{I} + i)^{n} - \mathbf{I}}{i} (\mathbf{I} + i)^{m} + \frac{(\mathbf{I} + i)^{m} - \mathbf{I}}{i}$$

$$= \frac{(\mathbf{I} + i)^{n+m} - \mathbf{I}}{i}$$

At
$$3 \circ /_{\circ}$$
—
$$S_{\overline{130}|} = S_{\overline{100}|} \times (1 + i)^{30} + S_{\overline{30}|}$$

$$= 607 \cdot 28773 \times 2 \cdot 42726 + 47 \cdot 57542$$

$$= 1521 \cdot 6206.$$

We have seen above that $1.03^{130} = 46.6486$, and at $3^{\circ}/_{\circ}$

$$S_{\overline{130|}} = \frac{1.03^{130} - 1}{0.3}$$
$$= \frac{45.6486}{0.3} = 1521.62.$$

Sinking Fund =
$$\frac{\mathbf{I}}{S_{n|}}$$

To find the annual payment to amount to 1 in m+n years, take the reciprocal of the amount of 1 per annum.

At $3^{\circ}/_{\circ}$ the amount of 1 per annum for 130 years is (as above) 1521'62, and the Sinking Fund payment is $1 \div 1521'62 = 000657$.

The Present Value of $\pounds_{\mathbf{I}}$ per Annum = $\mathbf{a}_{\mathbf{n}|}$

To find the present value of \mathbf{i} per annum for n+m years, multiply the present value of \mathbf{i} per annum for n years by the present value of \mathbf{i} for m years, and add the present value of \mathbf{i} per annum for m years.

$$\begin{split} a_{\overline{n+m}|} &= a_{\overline{n}|} \times \mathbf{V}^m + a_{\overline{m}|} \\ &= \frac{\mathbf{I} - \mathbf{V}^n}{i} \times \mathbf{V}^m + \frac{\mathbf{I} - \mathbf{V}^m}{i} \\ &= \frac{\mathbf{I} - \mathbf{V}^{n+m}}{i}. \end{split}$$

At 3°/,—
$$a_{\overline{130}} = a_{\overline{100}} \times v^{30} + a_{\overline{30}}$$
= 31'59891 × '41199 + 19'60044 (pp. 122, 123)
= 32'6189.

The Annuity I will Purchase = $\frac{I}{a_{\bar{n}|}}$

To find the annuity r will purchase, take the reciprocal of the present value of r per annum.

At 3°/
$$_{\circ}$$
—
$$\frac{\mathbf{I}}{a_{\overline{130}}} = \mathbf{I} \div 32.6189$$
= .030657.

If the interest on I for I year is deducted from the annuity I will purchase, we have the Sinking Fund payment.

That is,
$$\frac{1}{a_{\tilde{n}}} - i = \frac{1}{S_{\tilde{n}}}$$

At $3^{\circ}/_{\circ}$ for 130 years '030657 - '03 = '000657, which is the Sinking Fund payment found above.

Present Value of the Reversion to a Perpetuity

As explained on p. 15, the present value of the reversion to a perpetuity is $\frac{1}{i} \Rightarrow \frac{1-V^n}{i} = \frac{V^n}{i}$. Consequently, we can obtain the value by dividing the present value of 1 by the interest on 1 for 1 year, or period.

Thus the present value of a reversion due 30 years hence at $5\frac{1}{2}$ % (which is not tabulated on p. 168) is (p. 140)—

This suggests an alternative method of finding the present value of r per annum.

$$a_n = \frac{\mathbf{I} - \mathbf{V}^n}{i} = \frac{\mathbf{I}}{i} - \frac{\mathbf{V}^n}{i}$$

$$a_{\overline{130}|} = \frac{1}{i} - \frac{V^{130}}{i}.$$

At 3 °/₀
$$a_{\overline{136}} = \frac{1}{.03} - \frac{.02144}{.03} = 33.3333 - .7147 = 32.6186$$
.

(See p. 23.)

Use of Logarithms

Results which are not given in the tables can usually be found with a minimum of trouble by means of logarithms (see pp. 60 sqq.).

TRANSACTIONS WITH MONEYLENDERS

On pp. 210, 212, and 214 there are tables at rates of interest ranging from 20-300°/o per annum. These rates are not in excess of those sometimes charged by moneylenders.

The amount and present value of £1 and of £1 per annum correspond with the tables at lower rates on pp. 106-164. They are given for 1-5 years. As explained on pp. 10-14, such tables can be readily calculated at other rates of interest if required.

On pp. 211, 213, and 215 we have the periodic payments to discharge a debt of £100 and its interest. The annual payments are found by dividing 100 by the present value of £1 per annum. Thus the annual premium at 100°/ $_{\circ}$ is:—

For 1 year
$$100 \div .5 = 200.000$$
 (p. 212)
,, 2 years $100 \div .75 = 133.333$,,
,, 3 ,, $100 \div .875 = 114.286$,,

The half-yearly, quarterly, monthly, and weekly rates are based upon the annual payments. If interest is to be, say, 100°/, per annum, it should be dealt with on that basis and not treated as 50°/, per 6 months, or 25°/, per 3 months, which is what is done when interest is added to the principal each time a half-yearly or quarterly payment is made.

The subject of nominal and effective rates of interest is dealt with on p. 19. At very high rates of interest it makes a great difference whether interest is converted annually, quarterly, or

monthly, as may be seen from p. 207.

Consequently, if payments are made more often than once a year, the total payments during the year, plus simple interest upon them, should amount to the annual payment. Moreover, no interest should be paid on the loan until the end of 12 months, or the complete repayment of the loan if within 1 year.

When quarterly payments are made there is interest

on the	e first pay	men	t for			9	months
29	second	23	22			6	,,
"	third	"	"	•	•	3	"
on I	payment	for			•	1.2	years

Hence the quarterly payment is found by dividing the annual payment by 4 + 1.5i where i is the interest on 1 for 1 year.

The half-yearly payments are found by dividing the annual payment by 2 + 5i, the monthly by 12 + 5i, and the weekly by 52 + 25i.

Whether the repayments are of uniform amount and paid at regular intervals, or whether they vary as to amounts and intervals, we should, in each financial year, credit the lender with simple

interest to the end of the year, or to the repayment of the loan if earlier. We should also credit the borrower with simple interest on his repayments from the date on which they were made till the end of the year or the repayment of the loan.

Let

L = the amount of the loan.

 P_1 ; P_2 , &c. = the various repayments.

t; t_1 , &c. = the time from payment to the end of the year or the repayment of the loan.

Excluding repayments, the amount of the loan and interest is at the end of the

ıst ye	ear	 •		٠	L(1 +i)
2nd	,,		•		$L(1+i)^2$
3rd	29				$L(1+i)^3$
nth	••				$L(1+i)^n$.

The amount of the repayments in any 1 year is-

$$\mathbf{P}_{1} + \mathbf{P}_{2} + \& \mathbf{c.} + i(\mathbf{P}_{1}t_{1} + \mathbf{P}_{2}t_{2} + \& \mathbf{c.}).$$

Thus, the amount of the repayments with interest is at the end of the

and so on.

If a man borrows a sum of money on January 1 and pays ± 32 each quarter, we have each year:—

	Date			Paid	Period to End of Year	Interest for 1 Month on £
March 31 . June 30 . September 31 December 31	o .	•	•	£ 32 32 32 32 32 32	9 months 6 ,, 3 ,, 	288 192 96

The interest on £576 for 1 month equals the interest on $576 \div 12 = £48$ for 1 year. For the moment we do not know the amount of the loan or the rate of interest, so we say that A = 128 + 48i.

TRANSACTIONS WITH MONEYLENDERS

If the loan was £100, the amount due to lender is £100 + 100
$$i$$
, borrower is $128 + 48i$

Difference £28 - 52 i

If the loan is paid off, the excess of the repayments over the loan, which is £28, equals the interest.

Hence

$$52i = 28$$

 $100i = \frac{28 \times 100}{5^2} = 53.85^{\circ}/_{\circ}.$

A reference to the table of quarterly payments on p. 211 shows the payment to be

at 50°/., 31.58 ,, 55°/., 32.12.

Our payment of £32 is therefore between 50 and 55 $^{\circ}/_{\circ}$, and nearer to 55 than 50.

Now, suppose a loan is to be discharged by 8 quarterly payments of £32 each: at the end of the second year the borrower is entitled to A+iA, *i.e.*, to a whole year's interest on the repayments and interest in the first year. He is also entitled to credit for the 4 payments and interest for the second year. In this case B = A = 128 + 48i.

The total due at the end of the second year is:-

$$A = 128 + 48i$$

$$Ai = 128i + 48i^{2}$$

$$B = 128 + 48i$$

$$Total = 256 + 224i + 48i^{2}$$

If the loan was £160, the lender is entitled to $160(1+i)^2$.

This amounts to $160 + 320i + 160i^2$ To credit of lender $256 + 224i + 48i^2$ Difference + $96 - 96i - 112i^2$

Since the interest equals the excess of the repayments over the loan, we have

 $112i^2 + 96i = 96.$

Solving this equation we find i = .591 and the rate of interest is $59.1^{\circ}/_{\circ}$. At $60^{\circ}/_{\circ}$ the quarterly payment is (p. 211) $20.094 \times 1.6 = £32.15$.

However irregular may be the dates and amounts of the repayments, we can find the rate of interest by the above method. For periods of 1 year or less it is found directly. For periods of more

than I year it is generally necessary to assume various values for i, i^2 , &c., and thus approximate to the rate of interest.

When the dates are irregular it may be well to reckon interest by days from date to date (see pp. 218, 219) instead of months.

It may be well to apply the method to a default in payment when the balance is forthwith demanded.

Assume £160 is to be repaid by 8 quarterly payments of £32 each; that the first two payments are met, and the third is not; then after 10 months from the date of the loan the remaining 6 quarterly payments, i.e., £192, are demanded.

The borrower is entitled to

The lender is entitled to $£160 + \frac{160 \times 10i}{12}$.

The repayments exceed the loan by (256 - 160 =) £96. This equals the difference in the interest, which is $\frac{(1600 - 352)i}{12} = 104i$.

Hence

$$104i = 96$$

$$100i = \frac{9600}{104} = 92.3^{\circ}/_{\circ}.$$

The default clause increases the rate from 59 to 92°/. The increase is frequently far greater than this.

If the rate of interest is known, there is no difficulty in making out the account as between borrower and lender by the methods described above.

The table on p. 216 gives the simple interest at various rates on \pounds 100 for a day, a week, and a month.

SIMPLE INTEREST

Days from Date to Date

The number of days from date to date is found from pp. 218 and 219. If both dates are in the same year, use p. 218. If one date is in one calendar year and the other date in the next year, both pages are needed. From the number for the later date subtract the number for the earlier. If February 29 comes between the two dates, add one.

The Amount of the Interest

To find the interest on capital for a given time at a specified rate we multiply together the capital, the number of days and the rate of interest per unit per annum, and divide by 365.

The amount of the interest is $\frac{C \times D \times i}{365}$, and it is immaterial in what order the multiplication is done. On pp. 220-249 tables are given at 5°/ $_{\circ}$ for every £100 from £100 to £10,000. That is, we have $\frac{C \times 05D}{365}$ for 100 values of C, and from these the interest on any amount of capital can be found.

As 5°/, the interest for one-fifth of a year, or 73 days, is 1°/, of the capital, or oiC,

Thus the interest at 5 $^{\circ}$ / $_{\circ}$ on £200 is (p. 232):—

For 31 days =
$$.8493$$

,, 31 + 73 = 104 ,, $.8493 + 2 = 2.8493$
,, 31 + 146 = 177 ,, ,, +4 = 4.8493
,, 31 + 219 = 250 ,, ,, +6 = 6.8493
,, 31 + 292 = 323 ,, ,, +8 = 8.8493

Thus each column on pp. 220-249 serves for 5 numbers of days, e.g., 31; 31+73=104; 31+146=177; 31+219=250; and 31+292=323.

To find the interest at other rates we multiply either

A, the capital, or

B, the number of days, or

C, the amount of interest at 5 $^{\circ}/_{\circ}$,

by twice the required rate per cent, and divide by 10.

Thus £975 for 85 days at 3 $^{\circ}$ / $_{\circ}$ equals:—

A, 5 °/ $_{\circ}$ for 85 days on (975 × 6=)£585. B, 5 °/ $_{\circ}$ on £975 for (85 × 6=)51 days.

C, (5°) on £975 for 85 days) × ·6.

	Capital	Days	Interest
	5 ⁸ 5	73	5.8200 = .01C
	500	12	·8219 (p. 224)
	85	12	1397 (p. 225)
		—	
Α	585	85	6.8116
	900	51	6·2877 (p. 240)
	75	51	°5240 (p. 241)
	-		
В	975	51	6.8117
	in the lat	in a	- 107C
	975	73	9.42 = .01C
	-		
	900	12	1.4795 (p. 224)
	75	I 2	1233 (p. 225)
C	975	85	$11.3258 \times .9 = 9.8114$

If the B method is adopted we may have tenths of a day. For example, $3^{\circ}/_{\circ}$ for 81 days gives 48.6 days. The maximum error from taking the nearest integral number of days is about 1s. 4d. on £1,000. For one-tenth of a day the interest on £1,000 is $3\frac{1}{4}d$.

It is probably best, as a rule, to use the A method in the first instance and to check it by C or B.

As a further example we may find to an unnecessary degree of accuracy the interest on £23,987. 16s. 3d. for 317 days at $3\frac{1}{16}$ °/₆.

This is £23,987.8125 for 292 + 25 days. For 292 days the interest is $4^{\circ}/_{\circ}$ of the capital. Dividing the capital by 10 and multiplying by twice the rate per cent., we have

,	, .,	, p			
		2,3 98	.481	$25 \times 6 =$	14,392'69
				$\times \frac{1}{9} =$	299.85
				٠.	
A		5 % for ;	317	days on	14,692°54
	Days	Capital		Interest	
	2 92	14,692.54 × ·c	4=		
	25	10,000	=	34,2466	(p. 229)
		4,600	=	15.7534	(p. 228)
		92			(p. 229)
		° 54	=	18	"
					37
	317	14,692 54	directed (638.0182	
С	292	23,987.81 × °C	4=	959.5124	
	25	20,000	=	68.493	(p. 228)
	•••	3,900	=	13'3562	,,
	•••	87	==		(p. 229)
		.81	-	. 28	"
					,,
	317	23,987.81	:	1041.6623	
	-				
		104'16623 × 6	=	624.9974	
			===		
		Amount of Inter	est	638.0182	

To five places of decimals the correct amount is £638.01831.

The B method is not convenient for this example since $31.7 \times 6\frac{1}{8}$ gives 194.1625 days, and on so large a capital sum the interest for 1625 of a day would amount to over 10s. The error would be small in proportion to the total interest, but a more nearly accurate result can be obtained with greater ease.

Referring to the above example A, the interest on £9,200 is given on p. 229 as £31.5068. Clearly the interest on £92 is 3151. For calculating simple interest by logarithms see p. 67.

Interest, Amount, and Discount

On pp. 250 and 251 are the interest, amount, and discount of \pounds_1 in a year, and in 9, 6, and 3 months. The interest is calculated annually, and consequently in 9 months it is $\frac{3}{4}$ of the interest earned in a year; in 6 months $\frac{1}{2}$, and in 3 months $\frac{1}{4}$ of the annual interest.

(31)

The 'amount' of \mathcal{L}_{I} is simply the addition of the interest to the original \mathcal{L}_{I} . Were the interest to be calculated at other intervals than that of I year the figures here given would be different, as

explained on p. 19.

Discount is the value at the beginning of a period of the interest to be received at the end—in other words, discount is the interest paid in advance. Thus the present value of £1 due at the end of a year, reckoning interest at $4^{\circ}/_{\circ}$, is £'96154 (p. 130). The value of £1 now due is, of course, £1, and the discount is the difference between these two amounts, which is £'03846; that is to say, if we owe an amount of £1 which is due to be paid 1 year hence, and, to suit the convenience of a creditor, we pay it 12 months in advance, we ought to be allowed a discount of £'03846; that is to say, we should pay £'96154 now instead of paying £1 a year hence. This is obviously fair, since if we invested the £'96154 at $4^{\circ}/_{\circ}$ for a year it would at the end of that time amount to the £1 we should have to pay.

Decimals of £1

On pp. 252-255 is given the decimal corresponding to every farthing in the £1. The first and last columns on each page give the pence and farthings up to $11\frac{3}{4}d$, while at the top of each of the other columns the shillings are stated to which the figures in the columns refer. Thus if we wish to know the decimal corresponding to 4s. 3d. we look in the column marked 4s. on the line marked 3d., and find that the required decimal is £21250. Again, if we want the decimal corresponding to 13s. $7\frac{1}{4}d$. we look on p. £54, column 13s., line $7\frac{1}{4}d$., and find the required decimal to be £68021. To obtain these results we must first convert the farthings into the decimal of a penny, then the pence and decimals of a penny into the decimal of a shilling, finally the shillings and decimals of a shilling into the decimal of a pound. Thus in the example we have just taken of 13s. $7\frac{1}{4}d$.

One farthing =
$$\frac{1}{4}$$
 = '25 of a penny,
7'25 pence = $\frac{7'25}{12}$ = '6042 of a shilling,
13'6042 shillings = $\frac{13'6042}{20}$ = '68021 of a pound,

which is the result given in the table.

To find the number of shillings, pence, and farthings corresponding to a given decimal we have only to look for the decimal nearest to the one we are dealing with, which is easily found in the table, as the decimals come in regular order throughout.

DECIMALS OF £1

To calculate the shillings, pence, and farthings corresponding to a given decimal we have only to carry out the converse of the process just described, multiplying first by 20 to get the shillings and decimals of a shilling, then multiplying the decimal part of a shilling by 12 to get the pence, and multiplying the decimal part of the penny by 4 to get the farthings. Thus:

> .68021 of a £ × 20 = 13.6042 shillings, '6042 of a shilling \times 12 = 7'25 pence, '25 of a penny \times 4 = 1 farthing.

It will be convenient to remember that is. is .05 of a £, 2s. is 'I of a \mathcal{L} , and every even number of shillings is expressed by half the number with a decimal dot to the left of it. Thus $4s = £ \cdot 2$; 12s. = £.6, and so on. In the same way an odd number of shillings is always represented by a decimal ending in 5, and is half its own amount. Thus 5s = £.25 of a £; 9s = £.45, and so on.

The figures in the column headed o shillings on p. 252 may be studied particularly, for it will be seen that the last four of them are repeated exactly in all the columns headed with an even number of shillings, while in the columns headed with an odd number of shillings the last three of them are repeated exactly, and the figure in the second decimal place is in every instance increased by 5. Familiarity with the figures in this first column, especially those relating to an exact number of pence, when combined with the rule just referred to relating to shillings, will enable anyone with a little practice to know the numbers of shillings and pence represented by a given decimal as readily as if the shillings and pence were actually written down, and conversely the decimal corresponding to any number of shillings and pence will be at once known without any calculation being consciously made.

Time in which an Amount Doubles at Interest

On p. 256 is stated the number of years in which an amount is doubled at simple and compound interest. At simple interest all we have to do is to divide 100 by the rate of interest; thus, £100 at 4 % yields £4 per annum, and dividing 100 by 4 we obtain 25 years as the time it will take for the interest to amount to the same as the principal, or, in other words, double the principal.

At compound interest we obtain the number of years in which the interest will amount to the capital approximately by dividing 69 by the rate of interest, and still more nearly by dividing '693 by the rate of interest and adding '35 to the result. Thus $\frac{.693}{.05} + .35 =$

13.86 + 35 = 14.21. See also p. 66.

Decimals of One Year

On p. 256 are given the decimals of 1 year, representing various numbers of weeks, months, and days. From what has been said on p. 7 it will readily be apparent how these figures are arrived at. There being 52 weeks in a year, 13 weeks, for example, is obviously $\frac{13}{52}$ of a year. To convert the fraction $\frac{13}{52}$ into a decimal we divide 13 by 52 and find that it goes 25 times. We assume the year to contain exactly 52 weeks, exactly 12 months, and exactly 365 days, the consequence being that though the figures given are right for practical purposes they are not entirely accurate. There are more than 52 weeks and more than 365 days in a year, while no calendar month is exactly $\frac{1}{12}$ of a year.

If we meet with the decimal of a year different from any given in the table, and desire to know how many weeks, or months, or days it corresponds to, we must multiply by 12 to get the answer in months, multiply by 52 to get the answer in weeks, and multiply by 365 to get the answer in days.

MORTALITY TABLES

MORTALITY TABLES

On pp. 258-266 certain statistics are given concerning the duration of human life. On pp. 258-259 the expectation or average duration of life is stated according to various mortality tables.

The first table mentioned is the Northampton, prepared by Dr Price in 1780. This table for many years after its publication was much used, and many calculations based upon it are retained in the present volume. It contains, however, a great many serious defects, and its use for transactions on a large scale as a guide to the duration of Life has long since been abandoned.

The Carlisle Table, published in 1815, was greatly superior to the Northampton, and may still be used with advantage in many transactions in which the duration of life is concerned. The English Experience Tables, No. 3 and No. 8, are based upon the mortality recorded by the Registrar-General. The data from which No. 3 was constructed were the Census Returns for the years 1841 and 1851, and the deaths that were registered during the 17 years from 1838 to 1854 inclusive. The English No. 8 Table was based upon the Census of 1911, and the deaths for the 3 years 1910 to 1912. These English Life Tables are the most reliable for the mortality of the general population.

Both the Healthy Males (H^M) and British Offices (O^M) Tables are based upon assured lives. The H^M Table was for some years the most reliable for its purpose, but has now been almost entirely superseded by the O^M Table. This is the result of the experience of 60 British Offices for the 30 years from 1863 to 1893. The tables here given refer to male lives, although the experience in connection with female lives has also been published (O^F). Both these tables deal with the mortality among those who have been subjected to medical examination and have since lived the lives of the English middle-class.

Speaking generally, the mortality among assured lives is more favourable than that among the general population, and the mortality of annuitants is more favourable than that of assured lives; hence it is important to employ the most suitable table according to the circumstances of each case. The experience of annuitants in British Offices has also been published, though these tables are not here included.

Another table of considerable importance in connection with annuity transactions is the Government Annuitants, in regard to which some information will be given later on.

The fundamental facts to be learnt from a life table are the

number living at the beginning of each year and the number dying during the year. When this information is available it is easy to calculate the probable number out of every 100 alive at the beginning of the year who will survive the year and who will die during the year; the percentage surviving and dying in each year together adds up to 100, as may be seen in columns 4 and 5 on pp. 262 and 263. The expectation of life given on pp. 258 and 259 shows the average duration of life among a large number of people, and is determined by dividing the total number of years that a given number of people will live by the given number of people under observation. Thus, if we examine the table on p. 263, from age 90 we see that of 1,460 living at age 90.

1,052	reach	the	age	of	91
723	,,		,,		92
469	,,		23		93
274	25		,,		94
135	23		22		95
49	,,		,,,		96
9	,,,		22		97
2,711					

Adding together the number who survive to the different ages, we find that the 1,460 people with which we commenced live between them 2,711 complete years; and, dividing this number by 1,460, we get an average of 1.857 complete years as the duration of life of each of the 1,460 people whom we commenced to observe at the age 90. This, however, considers only the *entire* years that are survived; lives that live to 91 years and 11 months are treated as if they only lived to 91. It is, however, much more likely that the deaths will be fairly evenly distributed throughout the year, and they may, therefore, be reckoned as happening in the middle of each year.

In these figures, therefore, we are reckoning that each one of the lives under observation would live six months less than would actually be the case, and if we add this half-year to the 1.857 years, we arrive at 2.357, which is the average expectation of life given in the H^M column on p. 259.

We sometimes hear of the Curtate (or cut short) expectation of life, which means the number of *complete* years of life which people of the given age may, on the average, expect to live; the Curtate expectation of life at age 90 is the 1.857 years, which we obtained above, and it is always half a year less than the complete expectation of life given on p. 259.

The expectation of life cannot properly be used in calculations

VALUES OF ANNUITIES

with which interest is concerned, for the reasons to be given hereafter (p. 38); nor can we learn from the expectation anything about the probable duration of life of any individual. It is, however, a remarkable fact that, while the time at which any individual will die is uncertain in the extreme, the average duration of life among large numbers of people is very uniform. The expectation of life should also be distinguished from the *Vie Probable*, or probable lifetime. This means the number of years that have to elapse before exactly half the number of people alive at a given age have died. Thus from the table on p. 263 we find that 51,373 people are alive at age 64. By age 75 we find that only half this number survives, the other half having died in the meantime. The *Vie Probable* at age 64 is therefore the difference between 64 and 75, viz. 11 years.

Mortality of Single Lives and Interest

The tables on pp. 268-292 are concerned with single lives and interest. They give the values of annuities and the single and annual payments to secure \pounds_{I} at death, together with the values of reversions.

Values of Annuities

The tables that are in many ways the most important are those which give the values of annuities to be received annually throughout the lifetime of the person of the age stated. In every case, unless specially mentioned as being otherwise, an annuity means an annual payment of \mathcal{L}_{I} , or of course g_{I} , or any other unit, the value being given in pounds if the annuity is £, 1, in dollars if the annuity is \$1, and so on. Annuity values derive their importance not merely from the immediate use that may be made of the table, but also from the facility with which other benefits dependent upon the duration of life may be derived from them. It is therefore worth while to explain in some detail how the annuity values may be determined. If we know that I year hence we have to pay £1, reckoning interest at 3°/, we can tell from p. 122 that we must have £.970874 in hand now in order to possess £1 in a year's time, while, according to the Carlisle Table on p. 266, we see that out of 30 people alive at age 95 seven will die during the year, and that consequently there will be 23 people alive 1 year hence to receive £1 each, assuming we have contracted with the 30 people to pay each of them f per annum as long as they are alive. In order to make this first payment to our annuitants we must therefore have 23 times £.970874, viz. £22.330102, and so on in succeeding years, as set out in the following table:-

Table Showing the Value of an Annuity of £1 per Annum payable at the End of the Year to each Survivor of 30 Persons, Age 95

Year	Number living at End of Year	Present Value of £x due at End of Year	Present Value of £1 to each Survivor
-	22	·970874	£ 22°3301
2	23 18	·942596	16.9667
3	14	915142	12.8120
4	11	·888487	9.7734
5	9	·862608	7.7635
6	7	·837484	5.8624
7	5	·813091	4.0655
8	3	•789491	2·3685 ·7664
9	1	.766417	7004
otal			82.7085

Total cost of 30 annuities, £82.7085. Cost of 1 annuity, £82.7085 \div 30 = £2.75695.

From this we see that, assuming mortality to occur according to the Carlisle Table, we need to have £82.7085 in hand now, and to be able to earn interest upon it at 3 % in order to pay an annuity to each of 30 people at present age 95. If this is the value of 30 annuities, the value of 1 annuity is £2.75695, or, stated to the nearest third decimal, £2.757 as given in the 3 % column on p. 271.

The advanced age of 95 was chosen as an illustration, in order to avoid the lengthy table required to illustrate the value for younger ages. It will be noticed that it is necessary to proceed year by year up to the end of the mortality table. It is not correct, as is sometimes supposed, to take the average duration of life and then see the present value of $\pounds_{\rm I}$ per annum for that number of years. Thus, according to the Carlisle Table, the average duration of life at age 35 is 31 years. If we take the present value of $\pounds_{\rm I}$ per annum for 31 years from the tables given on pp. 122-151, and compare them with the annuity values on p. 270, we have the following results:—

Rate	Value of Annu	Error	
of Interest	Expectation	Table, p. 270	in Excess
Per Cent.	£	£	£
3	20.000	18.433	1.267
4	17.588	16.041	1.547
5	15.593	14.127	1.466
6	13.929	12.573	1.356
7	12.532	11.295	1.237
8	11.350	10.532	1.112

PAYMENTS TO SECURE £1 AT DEATH

If interest had not to be considered, the value of an annuity could correctly be obtained from the average duration of life, since if, say, 100 people at age 35 live 3,100 years between them we must obviously have £3,100 to pay them £1 per annum during life. But when the accumulation of interest comes in we can no longer base our calculations upon the expectation of life, even with the use of an interest table, without getting, as shown above, erroneous results.

In these tables no provision is made for any expenses connected with the granting of annuities, such as has to be provided in the case of life assurance companies who grant them. Although the word annuity is used throughout the tables, the tables of course apply to income derived from any source, whether ordinarily called an annuity or not. Thus, suppose we wish to ascertain the value of a life interest derived from trust funds, or from a lease dependent upon the duration of life, these tables of annuity values of course apply.

Private individuals who use these tables for the purpose of dealing with annuities must remember that dealing with only a few lives is a very speculative transaction. A purchaser may buy a life interest to-day, and the life on whose duration the income depends may die to-morrow, and the bargain prove a bad one, or may live an abnormally long while, and the bargain prove a good one; so that no tables can give any idea of the value of an annuity on only one life. They give correctly the average value of annuities on many lives, and where many lives are concerned are a reliable guide. This is a point that should always be borne in mind by people dealing in life interests of any kind on a small scale.

On pp. 272 and 273 the values of annuities are given according to the Healthy Males Table published by the Institute of Actuaries.

*On pp. 276 and 277 we have the British Offices (O^M) annuity values. Both these tables are based upon assured lives and not upon annuitants. They are convenient for use in calculating the values of benefits other than annuities as explained on pp. 47-51.

On pp. 274 and 275 annuity values are given according to the experience of Government annuitants (1883). Fresh Annuity tables are needed at frequent intervals as mortality is changing. It is well known that annuitants live long, and consequently tables that correctly record the mortality experience of annuitants are not usually appropriate for determining the value of assurance, and vice versa. Several very heavy losses have been made in times past by this now most obvious fact having been overlooked.

Single and Annual Payments to secure £1 at Death

On pp. 278–289 the single and annual payments to secure ± 1 at death are tabulated. There is a very close connection between these

items and the values of annuities. Advantage is taken of this connection to derive the values of assurances from those of annuities by means of Premium Conversion Tables, such as are given on pp. 323 and 324, in describing which this connection is explained (pp. 47–50). For the moment it will be sufficient to notice that the single payments to secure \pounds_{T} at death can be readily obtained from the annuity values, pp. 263–277, by means of conversion tables, and the annual payments to secure \pounds_{T} at death can also be obtained from the same pages. For details see pp. 47–50.

Value of Reversions

If we wish to know the average value of the reversion to a sum of money on the death of a person of a given age we can at once obtain it by multiplying the single payment to secure f, I at death by the sum in question. If, however, we wish to know the value of a reversion to a perpetuity—that is to say, to a perpetual income such as may be derived from freehold property—it is convenient to proceed somewhat differently. On p. 206 we have the present value of a perpetuity to be entered upon at once, but if it is not to be entered upon until the death of a person of a given age it is obviously worth less than if we were to obtain possession at once. The difference between the present value of immediate and of deferred possession is the present value of the benefit the existing holder will receive from it; in other words, the difference between the value of immediate and of deferred possession is the value of an annuity on the life of the present holder. Thus at 4 % the value of a perpetuity with immediate possession is £,25. The value of an annuity at age 50 according to the Carlisle Table is f_{12} .869, so that the value of a perpetuity to be entered upon at the death of a person of age 50, according to the Carlisle Table at 4 %, is 25.000 – 12.869 = 12.131, which is the amount given on p. 292. Hence it appears that to obtain the present value of the reversion to a perpetuity at the death of a person of a given age we must deduct the value of an annuity during the life of that person from the value of a perpetuity to be entered upon immediately, as given on p. 206.

The present value of reversions of the kind are given in considerable detail on pp. 290 and 291, according to the Government Experience Table, because this is on the whole the most reliable table for the purpose. The values according to other tables and for other ages may readily be obtained by the simple rule just stated.

Two Lives and Interest

The tables on pp. 294-319 deal with various benefits that are dependent upon the duration of one or both of two lives. In such cases it is necessary to distinguish carefully in what way the lives enter into the question. We sometimes have to deal with joint lives. in which case an annuity is payable so long as both lives continue and ceases at the end of either of them, or in the case of joint life assurance the sum is paid on the occurrence of the first death. Then we have benefits such as annuities or assurances dependent on the duration of the longer of the two lives; that is to say, an annuity payable to the last survivor continues so long as either of the two people concerned is alive, or in the case of assurance the sum assured is paid at the death of the second of the two. Yet again we have Contingent Survivorship benefits, such as the assurance of a sum of money to be paid at the death of X, if Y is living when X dies, nothing being paid in the event of Y dving before X.

Joint Life Benefits

We will deal first with the values of annuities payable during the joint life of two persons—payable, that is to say, so long as both persons are alive, and ceasing when either of them dies.

We have already explained on p. 38 how the value of an annuity can be calculated if we know the probable number out of every 100 alive at the beginning of a year who will survive to the end of the year, and we must now explain how to ascertain this probability in regard to pairs of lives as distinguished from individual lives, with which we were formerly dealing. We may use in illustration the Healthy Males Mortality Table given on pp. 262 and 263, taking one life at age 30 and the other at age 60. The probability that a life aged 30 will survive one year is seen to be 99.2277 out of every 100, and that of a life aged 60 is 97.0322 out of 100. If we multiply these two probabilities together, we obtain the probability of both persons surviving the year, which works out at 96.283 out of 100. We can deal with successive years in the same way, and so make a fresh Mortality Table for pairs of lives instead of for individuals. Such a table for ten years is given below for two lives aged respectively 30 and 60 at the time they came under observation:

Tabl	e Showing pro	bable Dura	ation of Pairs	of Lives. H	M Table		
You	unger Life	El	der Life	Pairs o	Pairs of Lives		
Age	Probable Number out of every 100 who survive the Year	Age	Probable Number out of every 100 who survive the Year	Probable Number out of every 100 who survive the Year	Number of Pairs living at Beginning of each Year		
(1) 30 31 32 33 34	(2) 99·2277 99·2083 99·1895 99·1715 99·1496	(3) 60 61 62 63 64	(4) 97.0322 96.7962 96.5364 96.2510 95.9590	96·283 96·030 95·754 95·454 95·143	(6) 10,000 9,628 9,246 8,853 8,451		
35 36 37 38 39	99·1226 99·0891 99·0536 99·0220 98·9918	65 66 67 68 69	95.6569 95.3431 95.0111 94.6766 94.2660	94.818 94.475 94.112 93.751 93.316	8,040 7,624 7,203 6,778 6,355		
40		70	_	_	5,930		

The probable number of individuals who will survive out of every hundred at each age is given in column 4 on pp. 262 and 263, and by multiplying together the fractions obtained by putting these numbers as numerators and 100 as denominators we obtain the probability that a pair of lives of these ages will survive one year.

The first column gives the age of the younger life and the third column the age of the elder life, and the details given in columns 5 and 6 refer to pairs of lives of the ages given in columns 1 and 3. Columns 2 and 4 are copied from the mortality table on pp. 262 and 263. In column 5 we have the probable number out of every 100 pairs of lives who survive the year. This is obtained for ages 30 and 60 by multiplying $\frac{99.2277}{100} \times \frac{97.0322}{100}$, which equals $\frac{9628.3}{10000}$ as the probability for each pair, or 96.283 pairs per 100. The details for other years are obtained in the same way. The last column gives the number living at the beginning of each year out of every 10,000 pairs alive at the commencement. This corresponds to column 2 of the mortality table on pp. 262 and 263. By multiplying the number living at one pair of ages by the probability of surviving one year we obtain the number living at the commencement of the next age. Thus :--

$$10000 \times \frac{96 \cdot 283}{100} = 9628.$$

$$9628 \times \frac{96 \cdot 03}{100} = 9246.$$

and so on throughout.

JOINT LIFE AND SURVIVORSHIP BENEFITS

If the above table were continued till one or other member of all the pairs of lives had ceased to exist, we could determine the value of joint life annuities in the same way as we calculated the values of annuities on single lives on p. 38. Joint life annuity values are given on pp. 294–303 according to the Northampton, Carlisle, Government Experience (1883), and Institute of Actuaries, Healthy Males Tables. For the most part they are given at every five years of age for both lives. To give them for every year of age would take up a great deal of room. They may, however, be found for every year of age, according to the Government Experience, in 'Joint Life Annuity Tables,' published by the Institute of Actuaries; according to the Healthy Males Table in the 'Institute of Actuaries Life Tables;' and according to the Carlisle Table in 'Jones on Annuities.'

The single payment to secure \mathcal{L}_{I} at the cessation of the joint life—that is to say, at the death of either of two lives—is given according to the Northampton, Carlisle, and Healthy Males Tables on pp. 304–307. The figures in these tables may readily be found by means of conversion tables from the tables of joint life annuities, as already mentioned and as hereafter explained. By the use of these tables the annual payments during the joint continuance of two lives to secure \mathcal{L}_{I} at the first death can also be obtained by inspection by the use of conversion tables. They are given according to the Institute of Actuaries Table on p. 308.

Survivorship Benefits

On pp. 309-311 are given the values of annuities during the continuance of either of two lives. These differ from the joint life tables just considered, inasmuch as joint life annuities are payable only so long as *both* persons exist, and the last survivor annuities are payable so long as *either* of the two persons lives. If we have tables of joint life annuities and of single life annuities we can readily find the values of annuities payable during the continuance of either of two lives.

If we undertake to pay £1 per annum to each of two lives we can tell the value of that undertaking from the single annuity values given on pp. 268-277. Suppose the lives to be 30 and 60, then the value of the annuity on the life aged 30 by the Carlisle Table at $3^{\circ}/_{\circ}$ is £19.556, and on the life aged 60 £10.491, the value of the two together being £30.047. To pay these annuities would involve paying £2 per annum so long as both persons were alive, and £1 per annum to the survivor of the two. But the annuities we are now considering, those given on p. 310, only require £1 per annum to be paid during the joint continuance of the two lives, and

 \pounds_{1} per annum to the survivor of the two. The difference between these two arrangements is, therefore, \pounds_{1} per annum during their joint lives, and from the joint life annuity tables on p. 295 we know the value of this to be $\pounds_{9.529}$. Hence we get the rule that to find the value of an annuity on the survivor of two lives we must take the value of an annuity on each of the single lives, and deduct from the sum of these two the value of an annuity on the two joint lives. Thus according to the Carlisle Table at 3 % the value of an annuity

					£
On a life age 50 is (p. 270)		۰	0		14.303
On a life age 70 is (p. 271)		٥			. 7.123
On the two single lives is			•		21'426
On the joint lives is (p. 295)			**	٠	6.338
During the continuance of ellives is (p. 310)	ither	of th	ne two	}	15.088

In this way survivorship annuities for other ages and by other tables than those given on pp. 309-311 may readily be arrived at.

The single payment to secure £1 at the death of the last of two lives is given on pp. 312-314. These amounts, like so many others, may be at once obtained by means of premium conversion tables.

The same remark applies to the annual payments to secure the same benefit, which are given on p. 315, it being noted that the annual payments have to be continued during the continuance of either of the two lives.

Reversions to Perpetuities

On p. 316 the values of the Reversion to a Perpetuity on the death of the first and on the death of the last of two lives are given. It has already been explained (p. 40) how the value of a reversion to a perpetuity on the death of a single life may be obtained. Where two lives are concerned the process is exactly the same. Thus at 4% the value of a perpetuity to be entered upon immediately is (p. 206) £25; the value of an annuity during the joint continuance of two lives, each aged 60, according to the Healthy Males Table at 4%, is £6.779. Deducting this amount from the previous one we have (25.000-6.779=) £18.221, which is the amount given in the upper table on p. 316.

Similarly the value of an annuity during the continuance of either of two lives, each age 60, is, according to the Healthy Males Table at 4% (p. 311), £12'139. Deducting this from the value of a perpetuity to be entered upon immediately, we have (25'000 – 12'139=) 12'861, which is the amount given in the lower table on p. 316.

REVERSIONARY ANNUITIES

Reversionary Annuities

In the upper table on p. 317 we have the value of an annuity during the life of y after the death of x. Thus, suppose a father to be age 45 and his son to be age 20, this table tells us the present value of the annuity to be entered upon by the son on the father's death and to continue during the time that the son survives the father. The value of the annuity on the son's life only is, by the Carlisle Table at 3 % (p. 270), £21.694. The joint life annuity is (p. 295) £14.207; the difference between the two is £7.487, which is the amount given on p. 317 as the value of an annuity during the life of y aged 20 after the death of x aged 45.

Owing to the facility with which this calculation can be made it is not worth while to give in the tables more than a few examples of the results.

In the lower table on p. 317 we have the value of an annuity during the life of y, who is to be nominated at the death of x. In the preceding case y is supposed to be alive now, and there is, of course, the possibility that he may die before x, with the result that he would never come into the annuity at all. In the present case, however, we have the certainty that y will be alive at the death of x. Thus, suppose we wish to ascertain the value of a next presentation to a living, we may take the age of the person to be presented at 25, and suppose the present incumbent to be 45; then the problem is to find the value of an annuity on the life of a man aged 25 who is to be nominated at the death of a man aged 45. According to the Carlisle Table at 3 %, the present value of £1 to be received at the death of a man aged 45 is (p. 280) £:50885, and the value of an annuity on a life aged 25 is (p. 270) £,20.665. This, however, is the value of an annuity the first payment of which has to be made one year after purchase, but it is here supposed that the annuity is to be entered upon immediately, so that the first annuity payment of £1 must be added to the value of the annuity on the life aged 25, making it 21.665. The present value of this sum, payable at the death of a life aged 45, is therefore $21.665 \times .50885 = 11.024$, which is the amount given on p. 317 as the value by the Carlisle Table at 3% of an annuity during the life of y, aged 25, who is to be nominated at the death of x, aged 45, y, of course, being supposed to enter on the annuity immediately after the death of x. In using a next presentation to illustrate the point it is not implied that next presentations can now be sold. It may, however, at times still be useful to calculate their value, while in connection with appointments, leases on lives, and certain other kinds of property it may be convenient to know how to calculate the values of annuities on successive lives.

Contingent Assurances

On pp. 318 and 319 we have the single payments to secure £1 at the death of x provided he dies before y. This is a somewhat more complicated matter to calculate than any that we have dealt with previously. To obtain it we must take the single premium for joint life assurance on the two lives, and add to it the value of an annuity on two joint lives, one a year younger than x, the other of the age of y, divided by the probability of a life one year younger than x living one year. Then take the value of an annuity on two joint lives, one the age of x, the other one year younger than y, divided by the chance of a life one year younger than y living one year, subtract this result from the former result, and divide by z. This process may be more clearly apprehended by the following formula and example:—

$$A_{xy} = \frac{1}{2} \left(A_{xy} + \frac{a_{x-x}}{p_{x-x}} - \frac{a_{x}}{p_{y-x}} \right),$$

where A_{xy} = the single premium for an assurance on the life of x provided y be then alive.

 A_{xy} = the single premium for an assurance payable at the first death of x or y.

 $a_{x:y}$ = the value of a joint life annuity on x and y.

 p_x = the probability of a life age x dying within a year.

As an example let x = 30 and y = 50, and let us employ the Healthy Males Table with interest at 3 %. Then:

$$A_{xy} = A_{30.50} = \text{(see p. 306)} \qquad .6077$$

$$\frac{a_{x-1.y}}{p_{x-1}} = \frac{a_{29.50}}{p_{29}} = \frac{12.5147}{.992567} = 12.6084$$

$$By \text{ addition} = 13.2161$$

$$a_{3.1y-1} = a_{30.49} = \frac{12.7333}{.984780} = 12.9301$$

$$By \text{ subtraction} = 0.2860$$

Divided by
$$2 = 0.1430 = A_{xy}$$

which is the amount given on p. 319.

In the above example the values p_{x-1} or p_{29} and p_{y-1} or p_{49} are found on p. 262, and of A_{xy} on p. 306. The values of $a_{x-1;y}$ and $a_{x;y-1} = a_{29;50}$ and $a_{35;49}$ are not given in this book.

ANNUITIES ON THREE LIVES

Annuities on Three Lives

On pp. 320 and 321 the values of annuities for the joint continuance of three lives are given. Full tables for annuities on three lives would be very extensive, and it is therefore generally necessary to obtain them from the values of annuities on two joint lives by some such method as the following:—

Take the present value of the annuity on the joint lives of the two oldest, and find at what age the present value of an annuity on a single life will be equal thereto; the value of an annuity on the joint lives of the youngest of the three lives and the life of the age just found will be approximately the value of the annuity on the three lives. In general we shall be nearer the truth if we subtract to from the value just found. The two-life tables given in this book are not sufficiently full to enable the calculation of three-life annuities to be made in very many cases.

On p. 322 is given the value of an annuity during the longest of three lives. The values are obtained by adding together the values of the annuities on each single life, and subtracting from the sum the value of the annuity on each pair of joint lives, then adding the value of the annuity on the three joint lives. In this table, as in the previous one, complete tables of annuities on two joint lives are necessary to enable these values to be calculated.

Premium Conversion Tables

Pages 323 and 324 contain short Premium Conversion Tables, by means of which the single and annual premiums to secure £1 at death may be found by inspection. On p. 272 we see that according to the Institute of Actuaries Table at 3 $^{\circ}$ /, the value of an annuity on a life aged 40 is £17 176, and on p. 282 we find the single payment to secure £1 at death is £4706. This latter value may readily be found from the Single Premium Conversion Table on p. 323. Referring to the 3 $^{\circ}$ /6 column, we find that the single premium corresponding to an annuity value of £17 is £47573. The difference in the single premium corresponding to the decimal part of the annuity value is found from the lower table on p. 323, and must be subtracted from the premium corresponding to the annuity value of £17.

The difference corresponding to

'I	one-parties Management	.00291
.07	-	*0204
. 006	=	. 017
*0002	=	.1
1762	:=	*00513
	(47)	

We thus have the single premium corresponding to an annuity of £17 = 47573 Subtract difference . . . = 0.0513 Single premium when annuity is £17.1762 = 47060

which is the amount given on p. 282.

The differences, as can be seen from the above example, vary with the position of the figures in them in relation to the decimal point.

Thus at 3 %:—

The difference for	·I	is	°00291
for	,01	it is	*000291
for	'00I	it is	*0000291

and so on.

The explanation of this connection is very simple.

The annuity value designated a gives the present value of f, f per annum on the supposition that the first payment of the annuity has to be made one year hence, and that the last payment is to be made on the anniversary of the first which immediately precedes the death of the annuitant. If, however, one further annual payment is to be made after the death of the annuitant, and we know the value of an annuity on these conditions, the difference between the value of an annuity with the last payment before the death of the annuitant and that of an annuity providing for one payment after death will give the value of £1 to be received at death. The value of an annuity providing for this one extra payment is obtained by taking the present value of 1 + a due one year hence, which may be expressed by the formula v(1+a), where v is the value of \mathcal{L}_1 due one year hence. Clearly, after the first payment has been made on such an annuity as this, there still remains the same number of payments to make as under an ordinary annuity. Therefore, if we know the present value of the first payment of £1 which has to be made one year hence, and the present value of an ordinary annuity one year hence, we have the value of an annuity providing for one payment after the death of the annuitant.

Using the same example as before, we have:-

$$a = 17.1762 \text{ (see p. 272)}$$
 $1 + a = 18.1762$
 $v = .97087 \text{ (see p. 122)}$
 $v (1 + a) = 18.1762 \times .97087 = 17.6468$
Deduct $a = 17.1762$
 $v (1 + a) - a = 4706$

PREMIUM CONVERSION TABLES

This amount £:4706 is the single premium to secure £1 at death given on p. 282.

This table may be used to find the single premium for assurance on single lives, joint lives, the last survivor or survivors of any number of lives, and on successive lives; but not for contingent assurances.

The single premium for the assurance of £1 at death may very easily be found from the annuity value by a quite simple calculation even when no Conversion Table is available. We have just seen that v(1+a)-a=A, or the single premium. Now v, which is the present value of £1 due 1 year hence, is equal to 1-d, where d is the discount on 1 for 1 year. Hence we find that v(1+a)-a=(1-d)(1+a)-a, which is the same as 1-d(1+a). The value of d is on pp. 250, 251 for various rates of interest. Therefore the single premium is at once found by adding 1 to the value of the annuity, multiplying it by the rate of discount d, and subtracting the result from unity. Thus, to refer again to the example given above, $1+a=18\cdot1762$, $d=\cdot02913$ (p. 250). Therefore $1-d(1+a)=1-\cdot02913\times18\cdot1762=1-\cdot5294=\cdot4706$, which is the value of the single premium previously found.

Page 324 gives a table for finding the annual premium payable throughout life for the assurance of £,1 at death. The present value of all these annual payments is, of course, the same as the single premium to secure the same benefit, assuming the same Mortality Table and the same rate of interest to be employed in the calculations. Inasmuch as the annual premiums to be paid for assurance commence when the assurance is effected, so that the first premium has to be paid immediately, the number of annual premiums that have to be paid is one more than the number of annuity payments on the same life, since the first ordinary annuity payment is made one year after the annuity is taken, and the last is made prior to the death of the annuitant. Hence the single premium is the present value of an annuity the amount of which is the annual premium to secure f_{i} 1 at death plus the extra premium that has to be paid when the assurance is effected. Thus the annuity value plus I multiplied by the annual premium equals the single premium. That is to say, P(1 + a)= A, where P is the annual premium, A the single premium, and athe annuity value. We may put this another way and say that the single premium divided by the annuity value plus I equals the annual premium or $P = \frac{A}{I + a}$

We have just seen, however, that the single premium A can be expressed in terms of an annuity-value for A = I - d(I + a); hence

$$P = \frac{1 - d(1 + a)}{1 + a} = \frac{1}{1 + a} - d.$$

If, therefore, we wish to know the annual premium for the assurance of \mathcal{L}_{I} at death on a life aged 40 according to the Actuaries Table at 3 % we have

$$1 + a = 18.176$$
 (p. 272),
 $\frac{1}{1 + a} = \frac{1}{18.176} = .05502$,

 $\frac{1}{1+a}-d=.05502-.02913=.02589$, which is the annual payment during life to secure £1 at death given on p. 286.

If we make use of the Annual Premium Conversion Table on p. 324, we can only approximate to this result. The Conversion Table is only a short one and deals with the annuity value to the first decimal place. Looking on line '17 - 17'9,' column' 1, we find that the annual premium corresponding to an annuity value of 17'1 is '0261, which is a larger amount than the true value. If we look on the same line in column '2 we find the annual premium corresponding to an annuity value of 17'2 is '0258, which is less than the true value. The annuity value being 17'176 is approximately $\frac{3}{4}$ of the way between these two amounts, so that if we take $\frac{3}{4}$ of their difference, which is '0003 $\times \frac{3}{4}$ equals '0002, and subtract it from '0261, we have '0259, which corresponds very nearly with the annual premium given on p. 286.

In the Annual Premium Conversion Table we have no differences to deal with of the same kind as we have in the Single Premium Conversion Table. What we are concerned with in the Annual Premium Conversion Table is the variation in the rate of discount. If we want to know the annual premium to assure £1 at death on a life aged 40, according to the HM Table, with interest at 4% instead of at 3%, as previously, we must take the 4% annuity value from p. 272, where it is given as 15135, find from p. 324 the annual premium corresponding to this annuity value, which is '0329, and subtract from it '0093 (difference p. 324), so obtaining '0236 as the annual premium at 4%, which corresponds fairly well with the amount given on p. 286. If a closer approximation to the truth is required it can be obtained, as mentioned above, by adding 1 to the annuity value, dividing unity by this amount, and subtracting the rate of discount on pp. 250, 251. Thus, to repeat the last example, we have

$$P = \frac{1}{1+a} - d = \frac{1}{16 \cdot 1347} - 03846 = 06198 - 03846 = 02352.$$

Annual premiums, like single premiums, may be obtained from annuity values in this way in connection with single lives, joint lives, the last survivor or survivors of any number of lives, and successive lives. The premiums for contingent assurances cannot be obtained in this way.

LOGARITHMS OF NATURAL NUMBERS

PAGES 326-361 contain the logarithms of the natural numbers from 1 to 10,000.

The logarithm of a number is the index of the power to which the base must be raised to be equal to the number. Thus $5 \times 5 = 5^2$, where 5 is raised to the second power, and 2 is the index of the power. Again, $5 \times 5 \times 5 = 5^3$, where 5 is raised to the third power, and 3 is the index of the power. The base adopted for common logarithms such as are here given is 10, so that the logarithm

```
of 100 is 2 because 10^2 = 10 \times 10 = 100 of 1,000 ,, 3 ,, 10^3 = 10 \times 10 \times 10 = 1,000 of 10,000 ,, 4 ,, 10^4 = 10 \times 10 \times 10 \times 10 = 10,000
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and so on. But we may raise a number to any power we please, without confining ourselves to whole numbers. Thus $10^{.6666} = 4.641$ as may be seen from page 340, where 666612 is given as the logarithm of 4.641. Now $10^{.6666} = 10^{10000} = 10^{\frac{2}{3}}$ very nearly, but $10^{\frac{2}{3}} = 3\sqrt{10}^2$ that is the cube root of 100. The cube root of 100 is approximately 4.641, that is to say $4.641 \times 4.641 = 99.96$, which is very nearly 100. By means of logarithms we may get our results as nearly exact as we please, and the larger number of figures we have in our logarithms the more exact will our results be.

We have said that '6666 is the logarithm of 4.641, but there is nothing in the table to show where the decimal point ought to come. For anything that appears in the table to the contrary, 6666 is the log of 4641, or 46'41 or 464'1. The explanation of this is, that only one part of the logarithm, called the *mantissa*, is given in the table; the other part of the logarithm, called the *index* or *characteristic*, is supplied by inspection, according to certain rules which will be described presently. The rationale of these rules is very easy to follow. The mantissa is the decimal part of the index of the power to which 10 must be raised to equal a given number, and if the index is 0, it means that the power to which 10 has to be raised is less than unity, but as 10' or 10 to the first power = 10, it is plain that 10'6666 must be less than 10, whence it follows that the natural number corresponding to log '6666 cannot be 46'4 or 464, because these numbers are more than 10.

If we want to find the logarithm of 46.41, the complete logarithm must clearly be between 1 and 2, because 1 is the logarithm of 10, 2 is the log of 100 and 46 is between 10 Clearly, therefore, the log of 46 must have I for its index, and, looking in the table for the decimal part of the log corresponding to 4641, we find it to be 6666. fore the complete log of 46.41 is 1.6666. This means that 10 must be raised to a power the index of which is 1.6666, that is to say $10^{16666} = 10^{10000} = 10^{\frac{5}{3}} = 3^{9} \cdot 10^{5}$. Now 10^{5} equals 100,000, and the cube root of this is 46.41, more nearly 46.416, more nearly still 46.4158929. The reason why the index part of the log can be so readily determined by inspection, and why therefore it is unnecessary to tabulate more than the mantissa or decimal part of the logarithm, is based upon the fact that multiplication of numbers can be performed by adding their logarithms together. Now, as we have just seen, the log of 10 is 1, the log of 100 is 2, the log of 1,000 is 3, and so on. Hence, if we want to multiply a number by 10, we add 1 to the log; to multiply by 100 we add 2 to the logarithm, and to multiply by

log
$$(4.641 \times 10) = 0.6666 + I = I.6666 = log 46.41$$

,, $(46.41 \times 10) = I.6666 + I = 2.6666 = ., 464.1$
,, $(464.1 \times 10) = 2.6666 + I = 3.6666 = ., 464.1$
,, $(4641 \times 10) = 3.6666 + I = 4.6666 = ., 464.1$

1,000 we add 3 to the logarithm of the number. Hence,

This leads us to the rule for determining the index part of the logarithm. If the number whose logarithm is sought contain one or more integral figures the index or characteristic is always one less than the number of integral figures in the number, and is positive.

Negative Index

Frequently, however, we have to deal with numbers that are less than unity, in which case the index of the logarithm becomes negative, although the decimal part remains positive. Dealing with these negative figures as we previously dealt with the positive ones, we see that

$$10^{1} = 10$$
, therefore I is the log of 10
 $10^{0} = 1$,, 0 ,, I
 $10^{-1} = 1$,, $-1 \text{ or } 1$,, $\frac{1}{1}$
 $10^{-2} = 01$,, $-2 \text{ or } \frac{1}{2}$, , $\frac{1}{1}$
 $10^{-3} = 001$,, $-3 \text{ or } \frac{1}{3}$, , $\frac{1}{1}$

and so on. This leads us to the rule for finding the index of quantities less than unity, which is that the index is the same as the place

(52)

NEGATIVE INDEX

from the decimal point which the first significant figure of the number occupies. Thus the first significant figure of 'oo' is 1, which is in the third place from the decimal point, and the index of the log is consequently $\overline{3}$, while the mantissa is o. This index, as stated above, is minus, the minus sign being written over the index thus $\overline{3}$, not in front of it thus -3, in order to signify that the index only is minus, the mantissa remaining positive.

In dealing with numbers less than unity the mantissa is kept positive, and the index only is made negative for the sake of convenience in working; but if there were any advantage in doing so the mantissa as well as the index could, of course, be made negative. We know that the log of 4.641 is 0.6666, while the log of 100 is 2, and we can divide 4.641 by 100 by subtracting log 2 from log 0.6666. This gives us log 1.3334, the whole of which is minus, and is the log of .04641. The logarithm -1.3334 is the same as 2.6666, where the index only is minus, and the mantissa is plus. It is, however, found in practice much more convenient to keep the mantissa invariably positive, or plus, letting the index only be minus.

Referring again to the example we have already quoted, and applying these two rules, we get the following results:—

The special convenience of logarithms, and it is a very great one, is that by their aid numbers

can be multiplied by the addition of their logs.

" divided " subtraction ...

" raised to any power by the multiplication of their logarithms and their roots extracted by the division of their logarithms.

To find the Logarithm of a Number

Before giving examples of the use of logarithms, however, we must explain how to find the logarithm of a given number, and the number corresponding to a given logarithm. Where the number consists of only four figures it is immediately found from the tables by looking in the first column for the first three figures, and on the same line in

the column headed with the fourth figure the logarithm of the number will be found.

Thus on p. 328 we see that the decimal part of the logarithm of 1501 is 176381.

Again on p. 338 we find that the decimal part of the logarithm

of 4341 is 637590.

If, however, we want to find the logarithm of 43405, which is half-way between 4340 and 4341, we must take the logarithm as half-way between 637490 and 637590, which = 637540.

In order to facilitate finding the logarithms of numbers containing five or more figures, a column of differences is given on each page of the tables. In the case just given the difference is seen to be 100, which means that there is a difference of .000100 between the logs of one number and the next.

To obtain the logarithm of a number containing five figures we take the logarithm of the first four figures direct from the table, then multiply the difference by the fifth figure of the number, divide the result by 10 and add it to the logarithm of the first four numbers. Thus to repeat the example just given:

$$\begin{array}{ll} \log 4340 & = 637490 \\ \text{the difference } 100 \times 5 \div 10 = \underline{50} \\ \log 43405 & = \underline{637540} \end{array}$$

If we wish to find the logarithm of a number containing six figures we take the first four figures in the way just described, and to obtain the difference for the fifth and sixth figures we multiply the difference by the fifth and sixth figures and divide the result by 100.

Thus to find the log of 434054.

log 43405 = 637540
the difference for sixth figure
$$100 \times 4 \div 100 = 4$$

log 434054 = 637544

The differences in this case are exceptionally simple to calculate because in the example chosen the difference is exactly 100, but the simplicity of the calculation serves to show with special clearness the principle involved. This principle of course is, that to find the difference for the fifth figure of a number we must multiply the difference given in the table by a fraction of which 10 is the denominator and the fifth figure of the number is the numerator. For six figures the difference must be multiplied by a fraction of which the denominator is 100 and the numerator the fifth and sixth figures.

NUMBER CORRESPONDING TO LOGARITHM

To find the difference for seven figures the denominator is 1000 and the numerator the 5th, 6th, and 7th figures, and so on, as far as we please.

In dealing with these differences it must always be borne in mind that the figures printed in the Table of Differences come at the extreme right-hand end of the logarithms in the main part of the table. That is to say, if the difference printed in the last column is 100 it is understood to be really '000100. If the printed difference is 99 it is to be understood as '000099, while obviously the difference corresponding to the 5th figure must be in all cases less than the printed difference. If this is remembered there will be no fear of any mistake in taking out the logarithms for numbers containing five or six figures.

To find the Number Corresponding to a Logarithm

To find a number corresponding to a given logarithm we must look in the table for the nearest logarithm to the one we are dealing with. The first three figures of the logarithms are printed in large type on the top of the page. On the left-hand pages the first three figures of the *first* logarithm on the page are given. On the right-hand pages the first three figures of the *last* logarithm on the page are given, so that we can readily see whether the logarithm with which we are concerned does or does not come on a given page.

Now, let us suppose that we wish to find the natural number corresponding to the log 735868. From p. 342 we see that 735838 (which is 30 less than the logarithm we are dealing with) = 5443. The difference printed in the last column on this line is 80, and signifies that 80 corresponds to a difference of 1 in the 4th figure of the natural numbers, therefore 30 corresponds to a difference of $\frac{30}{80} \times 10$ in the 5th figure of the natural numbers. This = 375,

so that 7358686 is the log of 5443375.

Thus to find the number corresponding to a logarithm that is not given exactly in the table we must take from the table the nearest logarithm below the given logarithm and obtain the 5th and following figures of the natural number by dividing the difference between these two logarithms by the difference printed in the tables. The numerator of this fraction consisting of the difference between the given logarithm and the nearest logarithm below it printed in the tables, being multiplied by 10 to obtain the 5th figure of the natural number and by 100 to obtain the 6th figure, and so on.

Multiplication by Logarithms

Having seen how to find the logarithm corresponding to a number and the number corresponding to a logarithm, we may now proceed to the practical use of logarithms.

Multiplication of numbers is accomplished by the addition of the logarithms of their numbers, thus:

$$\log 2547 = 3.406029 \text{ (p. } 333\text{)} \\ \log 7383 = 3.868233 \text{ (p. } 350\text{)} \\ \log (2547 \times 7383) = \overline{7.274262} = \log 18804500.$$

The Index of the log being 7, there must be 8 figures in the answer.

A reference to p. 328 shows that the nearest logarithm to the logarithm of the answer is 274158, giving a difference of 104, which divided by the Tabular Difference of 231 equals very approximately 45 for the 5th and 6th figures of the answer.

Other examples of Multiplication by means of logarithms are appended.

Multiply 25.75 by 4.217

$$\log 25.75 = 1.410777 \text{ (p. 333)}$$

$$\log 4.217 = 0.625004 \text{ (p. 339)}$$

$$\log (25.75 \times 4.217) = 2.035781 = \log 108.58775 \text{ (p. 327)}$$

Multiply 3847 by .0632.

$$\log 3847 = 3.585122 \text{ (p. 337)}$$

$$\log .0632 = 2.800717 \text{ (p. 346)}$$

$$\log (3847 \times .0632) = 2.385839 = \log 243.1302 \text{ (p. 330)}$$

The exact answer in this case is 243·1304, which is obtained by using seven-figure logarithms, as follows:—

$$\log 3847 = 3.5851222$$

$$\log .0632 = 2.8007171$$

$$\log (3847 \times .0632) = 2.3858393 = \log 243.1304$$

It must, therefore, be borne in mind that to obtain exact results it is necessary to use a large number of figures in the logarithm, but the six figures given in the tables are sufficient for most practical purposes.

DIVISION BY LOGARITHMS

Division by Logarithms

The division of numbers is accomplished by subtraction of their logarithms, the logarithm of the divisor being taken from the dividend, the remainder being the logarithm of the quotient. Thus to divide 4364 by 2536 we have

$$\log 4364 = 3.639885 \text{ (p. 338)}$$

$$\log 2536 = 3.404149 \text{ (p. 333)}$$

$$\log (4364 \div 2536) = 0.235736 = \log 1.7208 \text{ (p. 323)}$$

Divide 426.53 by 32.79.

$$\log 426.53 = 2.629950 \text{ (p. } 339)$$

$$\log 32.79 = \underline{1.515741} \text{ (p. } 335)$$

$$\log (426.53 \div 32.79) = \underline{1.114209} = \log 13.008 \text{ (p. } 326)$$

Divide 32.79 by 426.53.

$$\log 32.79 = 1.515741 \text{ (p. } 335)$$

$$\log 426.53 = 2.629950 \text{ (p. } 339)$$

$$\log (32.79 \div 426.53) = 2.885791 = \log .076876 \text{ (p. } 353)$$

Divide 8652 by .0461.

$$\log 8652 = 3.937117 \text{ (p. 356)} \\ \log .0461 = \overline{2}.663701 \text{ (p. 340)} \\ \log (8652 \div .0461) = \overline{5.273416} = \log 187679 \text{ (p. 329)}$$

In the last example we are subtracting a negative characteristic, and of course the subtraction of a minus quantity is accomplished by the addition of the corresponding positive or plus quantity.

Divide .0461 by 8652.

$$\log \cdot 0461 = \overline{2} \cdot 663701 \text{ (p. 340)}$$

$$\log 8652 = 3 \cdot 937117 \text{ (p. 356)}$$

$$\log (\cdot 0461 \div 8652) = \overline{6 \cdot 726584} = \log \cdot 000005328 \text{ (p. 343)}$$

In this example we are subtracting a positive characteristic from a negative one, and this involves the addition of the corresponding negative quantity. If, as we have just seen,

$$\begin{array}{c} \log \ (8652 \div 0461) = \log \ 187679 & = 5 \cdot 273416 \ \text{and} \\ \log \ (\cdot 0461 \div 8652) = \log \ \cdot 000005328 = \overline{6} \cdot 726584 \\ \log \ (187679 \times \cdot 000005328) = \overline{0} \cdot 000000 = \log \ \mathbf{1}, \end{array}$$

thus affording an instructive proof of the accuracy of the results by adding the two logarithms together and obtaining the answer.

It is frequently convenient to add the complement of the log instead of subtracting the log. The complement, viz., co-log, is found by subtracting the log from o which is the log of I.

Thus
$$\log \left(\frac{4364 \times 2536}{426 \cdot 53}\right)$$
 is $\log 4364 = 3 \cdot 639885$ $\log 2536 = 3 \cdot 404149$ $\cos 426 \cdot 53 = 3 \cdot 629950 = 3 \cdot 370050$ $4 \cdot 414084 = \log 25946 \cdot 8$

Involution by Logarithms

To raise a number to any given power we multiply the logarithm of the number by the index of the power. Thus the log of the cube of 100 is $2.000 \times 3 = 6.000 = \log 1,000,000 = \log (100 \times 100 \times 100)$.

Similarly

$$\log \quad 733^2 = 2.865104 \times 2 = 5.730208 = \log 537289$$

$$\log \cdot 00733^2 = 3.865104 \times 2 = 5.730208 = \log \cdot 0000537$$

$$\log \cdot 00733^3 = 3.865104 \times 3 = 7.595312 = \log \cdot 000003938$$

In the last two examples we had negative characteristics to deal with, and it will be noticed that after multiplying the decimal part of the logarithm by 2 there was a positive remainder of 1, which is subtracted from twice the negative characteristic. Similarly in the cube there was a remainder of 2, which was subtracted from three times the negative characteristic. This treatment of the matter is an obvious consequence of the mantissa being positive and the characteristic negative.

Evolution by Logarithms

To find the root of a given number we must divide the logarithm of the number by the exponent of the root. Thus to find

> the square root of a number we divide the log by 2; ,, cube ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, " 22

and so on.

For example:

 $\log \sqrt[2]{537289} = 5.730208 \div 2 = 2.865104 = \log 733$ $\log \sqrt[3]{17.43} = 1.241297 \div 3 = 0.413766 = \log 2.5928$ $\log \frac{4}{2}$, 560000 = 6.408240 ÷ 4 = 1.602060 = $\log 40$ $\log \sqrt[3]{\cdot} 0081 = 3.908485 \div 3 = 1.302828 = \log \cdot 20083$ $\log \sqrt[3]{\cdot} 00081 = \overline{4} \cdot 908485 \div 3 = \overline{2} \cdot 969495 = \log \cdot 093217$ (58)

EVOLUTION BY LOGARITHMS

In this last instance we had a negative characteristic to deal with, and the most convenient way of treating it was to add -2 to the 4 of the index, so obtaining a number, $\overline{6}$, which is exactly divisible by 3. To compensate for thus dealing with the index we must prefix an index of +2 to the mantissa, and divide this result also by 3. The process thus becomes:

$$\overline{4} + \overline{2} \cdot \cdot \cdot \cdot = \overline{6}$$
 this $\div 3 = \overline{2}$
 $\cdot 908485 + 2 = \overline{2} \cdot 908485$ this $\div 3 = 0 \cdot 969495$
 $\overline{\log 4} \cdot 908485 \div 3 = \overline{2} \cdot 969495$

This produces the same result as if we had stated our entire logarithm as negative, divided it by 3, and subsequently converted it into a logarithm with a negative index and a positive mantissa. Thus:

-4.000000 +0.908485 -3.091515

is the same as

when both index and mantissa are negative.

This divided by 3 = -1.030505, the whole of which is still negative. But this equals $\overline{2.969495}$, where the index is negative and the mantissa positive, and this is the result obtained by dividing $\overline{4.908485}$ by 3.

Thus the rule for dividing a logarithm with a negative index if the index is not exactly divisible by the divisor, is to add such a negative number to it as will make it exactly divisible, and prefix to the fractional part of the logarithm a positive integer equal to the negative integer added to the negative index. Of course, by adding a minus quantity to one part of the logarithm and a corresponding plus quantity to another part of it, the value of the logarithm is unaltered.

COMPOUND INTEREST

The Amount of I

The amount of a principal P at the end of n years at i per unit per period is $P(x+i)^n$, as explained on p. 10.

In logarithms

$$\log P(1+i)^n = \log P + n \log (1+i).$$

The tables on pp. 362-411 gives $n \log (1+i)$ for 58 rates of interest. If the required rate is not tabulated we take $\log (1+i)$ from p. 415, or from a table of logarithms, and multiply it by n.

The amount of £17 in 5 years at 4% is $17 \times 1.04^5 = £20.68305$ (p. 11).

5 log 1.04=0.085 1667 (p. 364)
log 17=1.230 4489

$$1.3156156 = \log £20.6831$$

The amount of £957 for 25 years at $3\frac{1}{16}$ %, is £2034.3642. From p. 415 log 1.030625 is seen to be 0.013 1006 730. Multiplying by 25 we have—

$$\begin{array}{c}
25 \log 1.030625 = 0.327 \quad 5168 \\
\log 957 = 2.980 \quad 9119 \\
\hline
3.308 \quad 4287 = \log 2034.3642
\end{array}$$

If we require the amount of P for more than 100 years at any rate of interest given in the tables on pp. 362-411, we proceed as follows:—The amount of £1,000 at the end of 130 years at 3% is £46,648.6.

$$\log 1000 = 3.000 0000$$

$$100 \log 1.03 = 1.283 7225 (p. 411)$$

$$30 \log 1.03 = 0.385 1167 (p. 376)$$

$$4.668 8392 = \log 46,648.6$$

It will be seen that by means of logarithms enormous calculations may be made with the greatest ease. Thus suppose we want to know the amount to which 1d. will accumulate at 5 % compound

THE AMOUNT OF I

If we wish to extend the calculation and show what income would be yielded from such an amount as this at 5% interest every second to every man, woman, and child on the face of the earth, we have simply to divide by 20 to find the annual income from this sum, then by $365\frac{1}{4}$ to find the daily income, by 24 to find the income hourly, by 60 to find the income per minute, by 60 again to find the income per second, and finally by (say) 1,483 millions to find the income in each second for every individual in the world. These divisions are readily accomplished by adding the logarithms of the numbers together and subtracting the total from the logarithm of the amount of 1d. at the end of 1,900 years. Thus,

```
\log 1.05^{1900} = 40.259670
\log 240 = 2.380211
\log 20 = 1.301030
\log 365.25 = 2.562590
\log 24 = 1.380211
\log 60 = 1.778151
\log 60 = 1.778151
\log 1,483,000,000 = 9.171141 20.351485
19.908185
```

which gives us £80,944,000,000,000,000 per second as the income for every man, woman, and child in every second from the accumulations of 1d. at 5 % compound interest for 1,900 years.

Present Value of £1

On p. 11 we showed that $v^n = \frac{1}{(1+i)^n}$, where *n* represents the number of years or periods. Hence the logarithm of the present value of P dues in *n* years is $\log P - n \log (1+i)$.

Thus the present value of £83 due at the end of 10 years at 4 % is £56.0715.

$$\log 83 = 1.919 \text{ o}781$$

$$10 \log 1.04 = 0.170 \quad 3334 \text{ (p. 366)}$$

$$1.748 \quad 7447 = \log 56.0718$$

$$(61)$$

The Annuity £1 will Purchase

It is explained on p. 14 that the annuity \mathcal{L}_{I} will purchase is the reciprocal of the present value of \mathcal{L}_{I} per annum: it is represented by $\frac{1}{a_{CI}}$ or $\frac{i}{1-v^{n}}$.

The logarithms of $\frac{1}{a_{\tilde{n}|}}$ are given in detail on pp. 362-411.

The annuity for 27 years which £183 will purchase at $4^{\circ}/_{\circ}$, or in other words the annual payment to redeem a debt of £183 in 27 years and pay interest upon it at $4^{\circ}/_{\circ}$, is 11'2067.

$$\log 183 = 2.262 4511$$

$$\log \frac{1}{a_{\overline{27}|}} = \overline{2.787} 0248 \text{ (p. 375)}$$

$$\underline{1.049} 4759 = \log 11.2067$$

We can check this by dividing 183 by the present value of 1 per annum (p. 130), which gives $183 \div 16 \cdot 32959 = 11 \cdot 2067$.

Present Value of £1 per Annum

We have just seen that the present value of an annuity is the reciprocal of the amount of the annuity which I will purchase for the same period at the same rate of interest. In other words, the annuity which I will purchase and the present value of an annuity multiplied together produce unity—the period and the rate of interest, of course, being the same in both cases. The logarithms of the annuity which I will purchase are given in the column headed $\frac{I}{a_{z|}}$ on

pp. 362-411. By subtracting this tabulated logarithm from o, which is the log of 1, we obtain the logarithm of the present value of an annuity of 1.

What is the present value of \pounds_{I} per annum for 30 years at 5 %?

log
$$i = 0.000$$
 cooo

Log of annuity which i will purchase
for 30 years at 5 % . . . = $\overline{2}.813$ 2570 (p. 376)

Log of present value of £ i per annum
for 30 years at 5 % . . . = $\underline{1.186}$ 7430 = log £ i 5.37245

This result may be seen in the table on p. 138. Although the present values of annuities are given in natural numbers on

PRESENT VALUE OF I PER ANNUM

pp. 106-164, it is often convenient to have the logarithms of the values rather than the natural numbers. Thus, suppose we want to know the present value of an annuity of £47.25 per annum for 30 years at 5 %. To obtain the result we must multiply the value of £1 per annum by 47.25, and this can be done by subtracting

the log of $\frac{1}{a_{\tilde{n}|}}$ or by adding its co-log (see p. 59).

$$\log \frac{47.25 = 1.674}{a_{30}} = \frac{1.674}{2.861} 2570 \text{ (p. 376)}$$

$$2.861 1448 = \log £726.35$$

Or we may take

log
$$47.25 = 1.674$$
 4018
co-log $\frac{1}{a_{30}^{-}} = 1.186$ 7430 (p. 376)
 2.861 1448 = log £726.35

The present value of 1 per annum for 30 years at 5° /. is 15.37245 (p. 138) which multiplied by 47.25 = 726.35.

If we require the value of \mathcal{L}_{I} per annum at a rate of interest that is not given in the table, it can readily be found by logarithms. We have

$$\begin{aligned} \mathbf{P}a_{n}^{\cdot} &= \mathbf{P}\left(\frac{\mathbf{I}-v^{n}}{i}\right) = \frac{\mathbf{P}}{i} - \frac{\mathbf{P}v^{n}}{i}. \\ \text{Now} & \log \frac{\mathbf{P}}{i} = \log \ \mathbf{P} - \log \ i = \log \ \mathbf{P} + \text{co-log} \ i \\ \log \frac{\mathbf{P}v^{n}}{i} &= \log \ \mathbf{P} - (\log \ i + \log \ (\mathbf{I} + i)_{n}). \end{aligned}$$

We find the natural number for $\frac{P}{i}$ and then subtract the natural number for $\frac{Pv''}{i}$.

The present value of 725 per annum for 40 years at $3\frac{1}{5}^{\circ}/_{\circ}$ is $16229\cdot37$

$$\log 725 = 2.860 3380$$

$$-\log \cdot 032 = \overline{2.505 1500}$$

$$\log \frac{275}{i} = 4.355 1880 = \log 22656.25$$

$$40 \log 1.032 = \underline{0.547 1880}$$

$$-\log \frac{275v''}{i} = 3.808 0000 = \log 6426.88$$

$$275a_{40}^{-} = \overline{16229.37}$$
(63)

Present Value of Perpetuities

The last example illustrates what was said on pp. 19 and 24 about the present value of a perpetuity to be entered upon at once, which is $\frac{1}{i}$, and about the reversion to a perpetuity to commence n years hence, which is $\frac{v^n}{i}$. The difference between the two is the present value of 1 per annum for n years, which is a_n , as stated on p. 13—

$$a_n = \frac{1 - v^n}{i} = \frac{1}{i} - \frac{v^n}{i} = \frac{1}{i} - \frac{1}{i(1+i)^n}$$

The log of i is given for many rates of interest on p. 414, of $(1+i)^n$ on pp. 362-411, and of (1+i) on p. 415.

In the last example we found the value of a perpetuity of £725 per annum to be entered upon immediately to be £22,656.25 at $3\frac{1}{5}$ %, and the same perpetuity deferred 40 years to be £6,426.88.

The Amount of £1 per Annum

If we know the present value of the annuity, and if we know also the sum to which $\pounds_{\mathbf{I}}$ will amount in the given period, we can, by multiplying the present value by the amount of $\pounds_{\mathbf{I}}$, obtain the sum to which the annuity will amount in the period. Thus, suppose we wish to ascertain the amount of $\pounds_{\mathbf{I}}$ per annum for 20 years at 5%. Turning to p. 138, we see that the present value of $\pounds_{\mathbf{I}}$ per annum is 12.46221, and on the same page we see that the amount of $\pounds_{\mathbf{I}}$ in 20 years is 2.6533. Multiplying these two amounts together we have 33.066, which agrees with the amount of $\pounds_{\mathbf{I}}$ per annum given on the same page.

The reason of this connection is plain, for since the possession of an annuity of £1 for 20 years at 5% is mathematically equivalent to having £12.46221 in hand now, and as the sum to which £12.46221 will amount in 20 years is the amount of £1 in 20 years multiplied by 12.46221 (=2.6533 × 12.46221 = 33.066), this must also be the sum to which an annuity of £1 will amount in 20 years at 5%. This result may very easily be obtained by logarithms from the

tables on pp. 362-411. In the column headed $\frac{1}{a_{\tilde{n}|}}$ we have, as already explained, the reciprocal of the present value of an annuity, and in the column headed $(1+i)^n$ we have the amount of £1.

The amount of P per annum for n years is

$$PS_{n|} = P\left(\frac{(\mathbf{1}+i)^n - \mathbf{1}}{i}\right) = Pa_{n|} \times (\mathbf{1}+i)^n = P\left(\frac{\mathbf{1}-v^n}{i} \times (\mathbf{1}+i)^n\right).$$
(64)

In logarithms

$$\log PS_{n|} = \log P + \log (\mathbf{1} + i)^n + \operatorname{co-log} \frac{\mathbf{I}}{a_{n|}}.$$

The amount of £735 per annum at the end of 34 years at $2\frac{7}{8}\%$ is £41,451.68.

co-log
$$\frac{1}{a_{\overline{3}|}} = 1.3327200$$
 (p. 378)
34 log $1.02875 = 0.4185348$ (p. 378)
log $735 = \underline{2.8662873}$
 $\underline{4.6175421} = \pounds 41,451.68$.

Sinking Fund

As explained on p. 17 the payment to amount to 1 in n years is the reciprocal of the amount of 1 per annum which is S_n . We have just seen that $S_{\bar{n}|} = a_{\bar{n}|} \times (1+i)^n$; consequently the sinking fund payment to amount to P in n years is—

$$\frac{\mathbf{P}}{\mathbf{S}_n} = \mathbf{P} \div (a_{n} \times (\mathbf{1} + i)^n) = \mathbf{P} \times \frac{\mathbf{I}}{a_{n}} \times \frac{\mathbf{I}}{(\mathbf{1} + i)^n}.$$

In logarithms

$$\log \frac{P}{S_n} = \log P + \log \frac{I}{a_n} + \text{co-log } (I + i)^n.$$

The annual sinking fund that will amount to 337 in 45 years at $2\frac{5}{8}$ %, is 4.00433.

$$\log 337 = 2 \cdot 527 \quad 6299$$

$$\log \frac{1}{a_{45}} = \overline{2} \cdot 581 \quad 2929 \text{ (p. 384)}$$

$$\operatorname{co-log} (\mathbf{1} + i)^{45} = \overline{1} \cdot 493 \quad 6073 \text{ (p. 384)}$$

$$\log \frac{337}{S_{35}} = \overline{0 \cdot 602} \quad \overline{5301} = \log 4 \cdot 00433.$$

Annuities for which the Rate of Interest on Capital is Different from the Rate for Sinking Fund

As explained on p. 18 the annual payment to amount to £1 in years if accumulated at $3^{\circ}/_{\circ}$, and to pay interest on the £1

at
$$5^{\circ}/_{\circ}$$
 is $\frac{1}{S_{10}} + .05 = \frac{1}{a_{10}} + .05 - .03$.

$$\log \frac{1}{a_{10}} = 1.069 \text{ 0.407} = \log 0.117231 \text{ (p. 366)}$$
add $.05 - .03 = 0.02$

This is equal to the sinking fund payment of '087231 (p. 180), with '05 added.

$$\log o'137231 = 1'137 4523$$

the co- $\log = o'862 5477 = \log 7'28698$

The value given for this annuity on p. 192 is 7.28701. By taking the co log we obtain the reciprocal, and $1 \div 0.137231 = 7.28698$.

6

TIME AND COMPOUND INTEREST

On p. 33 it is said that the time in which an amount doubles at compound interest can be found approximately by dividing '69 by the rate of interest per unit. This rule is based upon the fact that if

at 4°/_o.
$$(1+i)^{n} = 2$$

$$n \log (1+i) = \log 2$$

$$n = \frac{\log 2}{\log (1+i)}$$

$$n = \frac{\log 2}{\log 1 \cdot o_{4}} = \frac{o \cdot 3 \circ 1 \circ 3}{o \cdot o_{17} \circ 33} = 17.673.$$

We convert these common logarithms into 'natural' logarithms by multiplying by $\frac{2\cdot3026}{2\cdot3026}$ which gives

$$\frac{\cancel{\cdot}30103}{\cancel{\cdot}017033} \times \frac{\cancel{2}\cancel{\cdot}3026}{\cancel{2}\cancel{\cdot}3026} = \frac{\cancel{\cdot}69315}{\cancel{\cdot}03922}$$
$$= \frac{\cancel{\cdot}69315}{\cancel{\cdot}03922} = 17\cancel{\cdot}673.$$

It happens that the natural log of 1 o4 is o3922, which is not greatly different from o4. For the rates of interest in most ordinary use $\log_{\epsilon} (1+i)$ is nearly equal to i.

A kindred rule could be found for any other number than 2, and we could make the rule as exact as we please for each rate of interest by

multiplying the log of the number by
$$\frac{i}{\log (1+i)}$$
.
Thus $\log 3 \times \frac{\circ 4}{\log 1 \cdot \circ 4} = \circ \cdot 47712 \times \frac{\circ 4}{\circ 1703} = \circ \cdot 47712 \times 2 \cdot 35 = 1 \cdot 12$.

This gives $1.12 \div .04 = 28$ years, in which time 1 amounts to 2.9987 at $4^{\circ}/_{\circ}$ (p. 130).

The doubling rule also enables us to tell in how long I per annum will amount to the sum that, at the same rate, would yield I per

annum in perpetuity. We have $S_{\tilde{n}|} = \frac{1}{\tilde{s}}$

$$\frac{(\mathbf{1}+i)^n - \mathbf{I}}{i} = \frac{\mathbf{I}}{i}$$
$$(\mathbf{1}+i)^n = 2$$
$$n = \frac{\log 2}{\log (\mathbf{1}+i)}.$$

At 4°/, this gives, as before, 17.67 years. In 18 years 1 per annum amounts to 25.65 (p. 130), which at 4% would yield 1.026 per annum in perpetuity.

NOMINAL AND EFFECTIVE RATES OF INTEREST

If the nominal rate of interest is $6^{\circ}/_{\circ}$ and interest is convertible quarterly at $1\frac{1}{2}^{\circ}/_{\circ}$ per quarter, the amount at the end of 4 quarters is $1\cdot015^4 = 1\cdot06136$, and the effective annual rate is $6\cdot136^{\circ}/_{\circ}$ (pp. 110 and 207).

By logs-

$$\log\left(1+\frac{.06}{4}\right)=\log 1.15,$$

and (p. 363) 4 log 1.15 = 0.025 8642 = log 1.061364, the effective rate is 6.1364°/, (p. 207).

If interest is to be converted quarterly at such a rate that in 4 quarters or 1 year it will amount to 1.05, we have $(1+i)^4 = 1.05$.

$$\log (1+i) = \log 1.05 = 0.021 1893$$
$$\log (1+i) = \frac{0.021 1893}{4} = 0.005297325 = \log 1.0122722.$$

The rate per quarter is 1.2272 per cent., which multiplied by 4 gives the nominal annual rate 4.90888 (p. 208).

· Simple Interest

To find the interest on capital we multiply together the capital, the number of days, and the rate of interest per unit per annum.

That is,
$$I = \frac{CDi}{365}$$
.

By logs-

$$\log I = \log \frac{D}{365} + \log i + \log C.$$

Log $\frac{D}{365}$ and log *i* are tabulated on pp. 412-414. Log C is found from a table of logarithms. It is generally sufficient to use five figure logs.

The interest on £975 for 85 days at 3°/. is £6.8116

$$\log 85/365 = \overline{1} \cdot 367 \quad 13 \text{ (p. 412)}$$

$$\log \cdot 03 = \overline{2} \cdot 477 \quad 12 \text{ (p. 414)}$$

$$\log 975 = 2 \cdot 989 \quad 00$$

$$0 \cdot 833 \quad 25 = \log 6 \cdot 8116.$$

$$(67)$$

We can find the answer in shillings by adding log 20 or in pence by adding log 240.

The interest for 83 days at $3\frac{7}{8}$ per cent. on £8,564 is £75. 9s. 3d.

log
$$8564 = 3.93268$$

log $83/365 = 1.35679$ (p. 412)
log $.03875 = 2.58827$ (p. 414)
log $20 = 1.30103$
 $3.17877 = log 1509.3s. = £75.9s.3.6d.$

If we know any three of the four factors in $I = C \times \frac{D}{365} \times i$ we can find the fourth:—

$$\log I = \log C + \log \frac{D}{365} + \log i$$

$$\log C = \log I - \left(\log \frac{D}{365} + \log i\right)$$

$$\log \frac{D}{365} = \log I - (\log C + \log i)$$

$$\log i = \log I - \left(\log C + \log \frac{D}{365}\right).$$

THE RATE OF INTEREST IN ANNUITIES CERTAIN

The present value of 1 per annum for 10 years is 8, and the annuity 1 will purchase is $\frac{1}{8} = .125$. What is the rate of interest?

We have the equation—

$$\frac{1}{a_{10}^{-}} = \frac{i}{1 - v^{n}} = 125,$$

but we cannot find from this the exact value of i. From interest tables we can find that $\cdot 125$ is between two rates that are tabulated: by using the difference between the two tabulated rates we can find the rate of interest with some approach to accuracy.

If
$$\frac{1}{a_{10}^{-}} = .125$$

$$\log \frac{1}{a_{10}^{-}} = 1.096 \text{ groo}$$
at 4.25% ,
$$\frac{1}{a_{10}^{-}} = 1.096 \text{ 3194 (p. 366)}$$
difference = $0.000 \cdot 5906 \times 46.61 = .0275$.

The rate of interest is 4.25 + .0275 = 4.2775°/. We can check the result by seeing if—

$$\frac{i}{1-v^{10}} = \frac{.042775}{1-v^{10}} = .125$$

$$. \log 1.042775 = 0.018 1906$$

$$10 \log 1.042775 = 0.181 906$$

$$10 \log v = \overline{1.818 094} = \log .65780$$

$$\frac{i}{1-v^{10}} = \frac{.042775}{1-.65780} = \frac{.042775}{.3422} = .125$$

$$.042 775 \times 8 = .3422.$$

or

The factor—in this case 46.61—may be explained. It is the reciprocal of 8 times the difference between $\log \frac{1}{a_n}$ at $4\frac{1}{4}$ and $4\frac{3}{8}$ °/ $_{\circ}$.

at
$$4\frac{3}{8}$$
 % $\log \frac{\mathbf{I}}{a_{10}} = \mathbf{I} \cdot 099$ 0010
at $4\frac{1}{4}$ % $\mathbf{I} = \mathbf{I} \cdot 096$ 3194
Difference $= 0.002$ 6816
Difference $\times 8 = 0.021$ 4528
 $\mathbf{I} \div 021$ 4528 $= 46.61 = .125 \div 0.002$ 6816.
(69)

The difference in $\log \frac{1}{a_{10}^{-}}$ for $\frac{1}{8}$ °/ $_{\circ}$ is 0.0026816 and on the same basis .021 4528 for 1 %.

If 1% gives a difference of $\frac{.021}{.021}$ 4528, a difference of $\frac{.000}{.021}$ 4528 in the rate: but multi-

plication is easier than division, so we use instead *ooo 5906 × 46 ·61.

Especially when the rates of interest tabulated differ by only $\frac{1}{8}$ °/ $_{\circ}$, no significant error results from using this method. It will frequently be sufficient to use only 2 figures of the factor and 5 figures of the log. The above example may be repeated.

$$\log \frac{\mathbf{I}}{a_{.0}^{-1}} = \mathbf{i} \cdot 0969\mathbf{I}$$

$$\log \frac{\mathbf{I}}{a_{.0}^{-1}} = \mathbf{i} \cdot 09632 \text{ at } 4.25\%$$

$$47 \times 0.00059 = 0.02773$$

$$100 \ i = 4.27773$$

$$error = .00002$$

$$true \ rate = 4.27775$$

The 21 years' lease of a house at a clear rent of £100 per quarter was bought for £5,200. The rate of interest yielded was 1.24025% per quarter.

log 100=2.000 0000
log 5200=3.716 0033
log
$$\frac{1}{a_{84}} = \overline{2}.283$$
 9967
log $\frac{1}{a_{84}} = \overline{2}.266$ 3468 at 1.125 % (p. 403)
 6.53×0.017 6499 = .11525 %
rate = 1.24025 %

At this rate

$$100 \ a_{84} = \frac{1 - v^{84}}{0124025} = 5199.89$$

$$error = \frac{11}{5200.00}$$

From p. 109 the present value of 100 per period for 84 periods at 1.25% is seen to be 5182.219. At a slightly lower rate the value is a little more.

THE RATE OF INTEREST IN ANNUITIES CERTAIN

An income of £100,000 a year for 100 years was bought for £2,000,000. The rate of interest was $4.9605^{\circ}/_{\circ}$.

log 100,000 = 5.000 0000
log 2,000,000 = 6.301 0300

$$\frac{\mathbf{I}}{a_{\overline{100}|}} = \overline{2.698} 9700$$

$$\log \frac{\mathbf{I}}{a_{\overline{100}|}} = \overline{2.691} 7111 \text{ at } 4.875 \text{ (p. 411)}$$

$$11.82 \times 0.007 2589 = .0858$$
Rate per cent. = 4.9608

At 4.9608 %.

100,000
$$a_{\overline{100}} = 1,999,892$$

error = 108

correct amount = 2,000,000

At 4.9605°/o.

100,000
$$a_{\text{roc}}|=2,000,008$$

error = 8

correct amount =2,000,000

The error is only $\cdot 0003$ °/ $_{\circ}$.

If the present value of 1 per annum for 100 years is 61.40864, the rate of interest is $1\frac{1}{16}$ °/ $_{\circ}$.

log
$$61.40864 = 1.788$$
 2296

log $\frac{1}{a_{roc}} = \overline{2}.211$ 7704

log $\frac{1}{a_{roc}} = \overline{2}.200$ 4604 at 1.000 % (p. 411)

 $5.56 \times .011$ 3100 = .06288

Rate per cent. = 1.06288

Correct per cent. = 1.06250

Error per cent. = 0.00038

LOAN REPAYMENT SCHEDULES

When a loan is to be repaid by equal yearly, half-yearly, or quarterly payments, and part of each payment is used for interest and part applied to reduction of debt, it is convenient, and sometimes necessary, to prepare a schedule showing the way in which each payment is disposed of and the amount of the capital outstanding.

The payment, P, to discharge a loan of C in n periods and pay the interest upon it is found by dividing C by the present value of

1 per period. That is (see p. 14)—

$$P = \frac{C}{a_{\overline{n}|}}$$

whence

$$Pa_{\bar{n}} = C$$

now
$$Pa_{\bar{n}|} = P(v^1 + v^2 + v^3 + \dots + v^n) = C$$
 (see p. 13),

so Pv'' is the capital repaid in the *n*th period, and $Pv''(1+i) = Pv^{n-1}$. Consequently we have only to multiply successively by (1+i) to find the capital paid off in each period.

There are various ways of multiplying by (1+i), some of which

may be shown.

As a very simple example, we may take that an annual payment of £162.745 will repay a loan of £1,000 and the interest upon it in 10 years at 10 $^{\circ}/_{\circ}$ per annum.

$$P = \frac{1000}{a_{10|}} = \frac{1000}{6 \cdot 14457} = 162 \cdot 745$$
 (p. 158),

or
$$P = 1000 \left(\frac{I}{S_{70}} + i \right) = 1000 (\cdot 162745) = 162 \cdot 745 \text{ (p. 184)},$$

or
$$\log P = \log 1000 + \log \frac{1}{a_{icl}} = 2.2115087 = \log 162.745$$
 (p. 306).

In the first year, which is the tenth from maturity, the interest is 10 $^{\circ}$ / $_{\circ}$ on £1,000=100. The capital repaid is P-100=62.745.

When the rate of interest is $10^{\circ}/_{\circ}$ we can multiply by (1+i) by adding $\frac{1}{10}$ each year, or can write the amount down at once by multiplying by $1\cdot 1$.

LOAN REPAYMENT SCHEDULES

If the schedule is to be given in $\pounds s$. d. the working can be done in $\pounds s$. d., in which case $P = \pounds 162$. 14s. 11d. It is here given in \pounds and in $\pounds s$. d.

Items.	Capital Repaid.	$i\operatorname{P}\!v^n.$	Capital Repaid.	$i P v^{\prime t}$.
P Ci	£ 162.745 100.000	£ 	£ s. d. 162 14 11 100 0 0	£ s. d 6 5 6
Pv ⁹ Pv ⁸ Pv ⁷ Pv ⁶	69.020 75.922 83.514 91.865	6·902 7·592 8·351 9·187	69 0 5 75 18 6 83 10 4 91 17 4	6 18 1 7 11 10 8 7 0 9 3 9
Pv ⁵ Pv ⁴ Pv ³ Pv ²	101.052 111.157 122.273 134.500	10·105 11·116 12·227 13·450	101 1 1 111 3 2 122 5 6 134 10 0	10 2 I 11 2 4 12 4 6 13 9 0
$\frac{\mathbf{P}v^{1}}{\mathbf{P}a_{\widetilde{10}} = \mathbf{C}}$	999•998	•••	147 19 0	

The capital repaid is found by the addition of iPv^{n} .

The interest paid each year is the difference between the annual payment and the capital repaid.

The capital outstanding is found by successive deductions of the capital repaid.

Having found the capital outstanding, the schedule is completed as follows:—

Year.	Interest.	Capital Repaid.	Capital Outstanding.
	\pounds s. d.	\mathcal{L} s. d.	£, s. d.
	***	(1,000 0 0
I	100 0 0	62 14 11	937 5 1
2	93 14 6	69 0 5	868 4 8
3	86 16 5	75 18 6	792 6 2
4	79 4 7	83 10 4	708 15 10
5	70 17 7	91 17 4	616 18 6
6	61 13 10	101 1 1	515 17 5
7	51 11 9	III 3 2	404 14 3
8	40 9 6	122 5 5	282 8 10
9	28 5 0	134 9 11	147 18 11
10	14 16 0	147 18 11	•••
	627 9 2	1,000 0 0	6,274 9 8
	Interest	627 9 2	
	10 Payments =		

The sum of the capital outstanding is £6,274. 9s. 8d., upon which interest at 10 $^{\circ}$ / $_{\circ}$ is £627. 9s.

This method can conveniently be adopted when we have simple rates of interest such as 2, 3, 4, 5, etc., or as $2\frac{1}{2}$ °/ $_{\circ}$, which is $\frac{1}{40}$ or 6d. in the pound, but when we have a more difficult rate of interest to deal with—such, for example, as $2\frac{3}{8}$ °/ $_{\circ}$ per period—and perhaps even in most cases, it is better to use logarithms.

In order to multiply by (i+i), we simply add $\log (i+i)$ to the logarithm of the capital repaid in the previous period, and then take the natural number corresponding to the \log .

Whatever process we adopt, it is desirable, as it always is in computing work, to use a method that makes each result depend upon all previous results, and to supply a check—say, every ten items—in order to make sure that there is no mistake, or, it may be, to make a slight adjustment in the figures.

LOAN REPAYMENT SCHEDULES

We may take as an example, a loan of £4,850 for forty half-years at $2\frac{3}{8}$ °/ $_{\circ}$ per half-year.

$$P = \frac{4850}{a_{40}^{-1}} \text{ which by logs is}$$

$$\log C \qquad 3 \cdot 685 \quad 7417 = \log 4850$$

$$\log \frac{1}{a_{40}^{-1}} \qquad \overline{2 \cdot 591} \quad 0891 \quad (p. \ 381)$$

$$\log P \qquad 2 \cdot 276 \quad 8308 = \log 189 \cdot 16065$$

$$- \cos \log a_{\overline{10}|} \qquad \overline{1 \cdot 055} \quad 0801 \quad (p. \ 366)$$

$$\log Pa_{\overline{10}|} \qquad 3 \cdot 221 \quad 7507 = \log 1666 \cdot 290$$

$$- \log (\mathbf{1} + \mathbf{i})^{10} \qquad 0 \cdot 101 \quad 9391$$

$$\log P(a_{\overline{20}|} - a_{\overline{20}|}) \qquad 3 \cdot 119 \quad 8116 = \log 1317 \cdot 685$$

$$- \log (\mathbf{1} + \mathbf{i})^{10} \qquad 0 \cdot 101 \quad 9391$$

$$\log P(a_{\overline{30}|} - a_{\overline{20}|}) \qquad 0 \cdot 101 \quad 9391$$

$$- \log (\mathbf{1} + \mathbf{i})^{10} \qquad 0 \cdot 101 \quad 9391$$

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The capital repaid in 20 years is $Pa_{\overline{z_0}}$, and in 10 years is $Pa_{\overline{z_0}}$.

$$\begin{split} \text{The difference is P}(a_{z\!\circ}^-|-a_{\overline{\imath}\!\iota}^-|) &= \mathbf{P}\!\left(\frac{\mathbf{I}-v^{\mathsf{qo}}-\mathbf{I}+v^{\mathsf{ro}}}{i}\right) \\ &= \mathbf{P}\!\left(\!\frac{v^{\mathsf{to}}-v^{\mathsf{qo}}\!)}{i} &= \mathbf{P}v^{\mathsf{tc}}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\!\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}\!\!\left(\!\frac{\mathbf{I}-v^{\mathsf{to}}\!}{i}\right) = \!\mathbf{P}v^{\mathsf{to}}\!\!a_{\overline{\imath}\!\circ}$$

Thus our check figures are :-

Periods from			Capital		Capital
Start.	Maturity.	Interest.	Repaid.		Outstanding.
I to 10 II ,, 20	31 to 40 21 ,, 30	849 11 11	£ s. d. 824 0 3 1,042 0 3	40 30 20	£ s. d. 4,850 0 0 4,025 19 9 2,983 19 6
31 ,, 40	11 ,, 20	573 18 6	1,317 13 8 1,666 5 10	0	

Interest
$$£2,716$$
 8 8 Capital repaid . . . $4,850$ 0 0 40 P=40×189·16065= $£7,566$ 8 8

It has been seen that the capital repaid in the *n*th period is Pv". Beginning with the 40th year from maturity we want Pv4⁴⁰, Pv³⁹, and so on. We find $\log Pv^{40}$ by subtracting

log
$$(1+i)^{40}$$
 from log P, and
log $Pv^{39} = \log Pv^{40} + \log (1+i)$
log $Pv^{38} = \log Pv^{39} + \log (1+i)$

and so on to the end of the table.

The addition of $\log (i+i)$ is conveniently effected by writing it on a card, or slip of paper, and moving it down line by line. On a calculating machine the addition of $\log (i+i)$ is extremely easy and no logs need be written down, as the natural numbers can be found from the logs shown on the machine.

Five figure anti-logs are quite sufficient to use, and to correct the last place 5 is added in the 6th place.

The value of Pv^{40} can be found by deducting from the payment, P, the interest for r period on the original loan.

$$P = 189 \cdot 161$$

$$4850 \times \cdot 02375 = 115 \cdot 188$$

$$Pv^{40} = 73 \cdot 973$$

Thus we have :--

Items.	Logs.	Capital Repaid.	Year.
Correction.	50		•••
$\log P = -\log (1+i)^{40}$	2·27683 08 0·40775 66	•••	• • •
$\log Pv^{40}$	1.86907 92	£73.972	ı
,, (I + i)	0.01010 30	***	•••
$\log Pv^{39}$	1.87927 31	75.730	2
$,, Pv^{38}$	88946 70	77.528	3
", P v^{37}	89966 09	79.371	4
,, P ₇ ,36	90985 48	81.255	5
$\log Pv^{35}$	1.92004 87	83.184	6
,, Pv ³⁴	93024 26	85.161	7
,, Pv ³³	94043 65	87.183	8
,, Pv ³²	95063 04	89.254	9
$,, Pv^{31}$	96082 43	91.373	10
		£824.011	

LOAN REPAYMENT SCHEDULES

The schedule for the periods 1 to 10 from commencement or 40 to 31 from maturity is on p. 79.

Some computers may prefer to work the results in $\pm s$. d., and if so, pounds can be converted into pence by adding $\log 240$.

Then we have for the next 10 years:-

Items.	Logs.		Capi	ital Repaid.
			Pence.	\pounds s. d.
og P v^{31} in £	1.96082	43	•••	•••
,, 240	2.38021	12	•••	•••
", Pv^{31} in d .	4.34103	55		•••
,, (1+i)	0.01010	39		• • •
,, Pv ³⁰	4.35122	94	22,450	93 10 10
			534	2 4 6
Pv^{29}	36142	33	22,984	95 15 4
- 00			545	2 5 5
,, Pv ²⁸	37161	72	23,529	98 0 9
70.07	0.0		560	2 6 .8
,, Pv ²⁷	38181	II	24,089	100 7 5
D 26		~ _	571	2 7 7
",, Pv^{26} "	39200	50	24,660 586	102 15 0 2 8 10
			300	2 0 10
og Pv ²⁵	4*40219	80	25,246	105 3 10
	4 402-9	- ,	600	2 10 0
,, Pv ²⁴	41239	28	25,846	107 13 10
<i>"</i>	. 02		613	2 II I
,, Pv ²³	42258	67	26,459	110 4 11
			629	2 12 5
$,, Pv^{22}$	43278	06	27,088	112 17 4
			643	2 13 7
Pv^{21}	44297	45	27,731	115 10 11

Capital repaid			1,042	0	2
The check is			1,042	0	3

The pence can be converted directly into $\pm s$. d. instead of the difference between the amounts being stated as in the tables.

In working, the figures in italics should, for convenience, be in red ink.

There may be some people who are not familiar with logarithms, who are unwilling to devote a few minutes to discovering how much

time and trouble they save, and who prefer to use simple arithmetic. To such it may be suggested that $2\frac{3}{8}$ % of Pv^n can be found by adding $\frac{1}{40}$, or 6d. in the £, and deducting $\frac{1}{20}$ of $\frac{Pv^n}{40}$.

A kindred dodge can be found for almost any rate of interest.

The capital repaid shown in the last column is found as follows:—

	1		
	Per cent.	£ s. d.	£ s. d.
Pv^{21}	$2\frac{1}{2}$ $-\frac{1}{8}$	+2 17 9 -0 2 II	115 10 11
$\mathrm{P}_{\mathcal{D}^{20}}$	$2\frac{1}{2}$ $-\frac{1}{8}$	+2 19 2 -0 3 0	2 14 10 118 5 9
Pv19	2 ½ 18	+3 0 7	2 I6 2 121 I II
Pv^{18}	$2\frac{1}{2}$ $\frac{1}{8}$	+3 2 0	2 17 7 123 19 6
Pv^{17}	2 ¹ / ₂	+3 3 6	2 18 11 126 18 5
Pv^{16}	$2\frac{1}{2}$ $\frac{1}{8}$	+3 5 0	3 0 4 129 18 9
$\mathrm{P}v^{15}$	$2\frac{1}{2}$ $\frac{1}{8}$	+3 6 6	3 I 9 133 0 6
Pv^{14}	$2\frac{1}{2}$ $\frac{1}{8}$	+3 8 I -0 3 5	3 3 2 136 3 8
Pv^{13}	$2\frac{1}{2}$	+3 9 9 -0 3 6	<i>3 4 8</i> 139 8 4
Pv^{12}	2 ¹ / ₂ ¹ / ₈	+3 11 4	3 6 3 142 14 7
Pv^{11}	. ***		3 7 9 146 2 4
Capital 1			T 217 T2 O

LOAN REPAYMENT SCHEDULES

A complete schedule is appended. It was worked on a calculating machine by the addition of $\log (i + i)$, and the value of Pv'' was found in pence as in the above example for Pv^{30} to Pv^{21} .

The anti-logs were found direct from the machine, and nothing had to be written down but the required results.

Conversion of pence into \pounds s. d. was facilitated by the use of a multiplication table by 240.

Schedule of Repayment of £4,850 in 40 Half-Years at $2\frac{3}{8}$ $^{\circ}/_{\circ}$ per Half-Year. Half-Yearly Payment, £189. 3s. 3d.

1 2 3 4 5 6	_	3 8 2 5	9 8 8	£ 73 75 77	s. 19	d. 6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
2 3 4 5 6	113 111 1 109 1 107 1	8 2 5 1	8	75			4,776 0 6
3 4 5 6	113 111 1 109 1 107 1	8 2 5 1	8	75			1777
4 5 6	109 1	5				7	4,700 5 11
5	107 1	-	10	- 11	10	7	4,622.15 4
6	·	8		79	7	5	4,543 7 11
	105 I		2	81	5	I	4,462 2 10
7		9	7	83	3	8	4,378 19 2
	104	0	0	85	3	3	4,293 15 11
8	IOI I	9	7	87	3	8	4,206 12 3
9	99 1	8	2	89	5	1	4,117 7 2
10	97 1	5	9	91	7	6	4,025 19 8
I	,067 1	2	2	824	0	4	
11	95 1		5	93		10	3,932 8 10
12	, ,	•	I	95	15	4	3,836 13 6
13			6	98	0	9	3,738 12 9
14		_	0	100	7	5	3,638 5 4
15	86	8	3	102	15	0	3,535 10 4
16	83 1	9	5	105	3	10	3,430 6 6
17		9	5	107	13	10	3,322 12 8
18	78 I	8	4	110	4	11	3,212 7 9
19	76	5 1	I	112	17	4	3,099 10 5
20	73 1	2	4	115	10	11	2,983 19 6
	849 1	2	4	1,042	0	2	

TABLE—(contd.).

Half-Years from Date of Loan.	Interest.	Capital Repaid.	Capital Outstanding
21 22 23 24 25 26 27 28 29 30	£ s. d. 70 17 5 68 1 3 65 3 9 62 4 10 59 4 6 56 2 10 52 19 7 49 14 11 46 8 9 43 0 11	£ s. d. 118 5 10 121 2 0 123 19 6 126 18 5 129 18 9 133 0 5 136 3 8 139 8 4 142 14 6 146 2 4	£ s. d. 2,865 13 8 2,744 11 8 2,620 12 2 2,493 13 9 2,363 15 0 2,230 14 7 2,094 10 11 1,955 2 7 1,812 8 1 1,666 5 9
31 32 33 34 35	39 II 7 36 0 5 32 7 9 82 I3 4 24 I7 0	1,317 13 9 149 11 8 153 2 10 156 15 6 160 9 11 164 6 3	1,516 14 1 1,363 11 3 1,206 15 9 1,046 5 10 881 19 7
36 37 38 39 40	20 19 0 16 19 1 12 17 3 8 13 7 4 7 9	168 4 3 172 4 2 176 6 0 180 9 8 184 15 6	713 15 4 541 11 2 365 5 2 184 15 6
Totals -	2,716 10 0 Interest 40 P=	4,850 0 0 2,716 10 0	

AMOUNT AND PRESENT VALUE

OF

ONE POUND

AND

ONE POUND PER ANNUM

VALUES OF PERPETUITIES AND REVERSIONS
NOMINAL AND EFFECTIVE RATES OF INTEREST
MONEYLENDERS' TABLES

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

					y make of				
Years	Years' Purchase 1	$\frac{1}{2}\%$	Years' Purchase 1	$\frac{3}{4}\%$	Years' Purchase	2%_	Years' Purchase 2	$\frac{1}{4}\%$	Years
1/2	°496	1/2	°496	$\frac{1}{2}$. 495	$\frac{1}{2}$	*494	1/2	$\frac{1}{2}$
1	.985	1	•983	I	·980	I	·978	I	I
$\mathbf{I}^{\frac{1}{2}}$	1.478	$1\frac{1}{2}$	1.474	$1\frac{1}{2}$	1.470	$I\frac{1}{2}$	1.467	$I^{\frac{1}{2}}$	$\mathbf{I}_{\frac{1}{2}}^{1}$
2	1.956	2	1.949	2	1.945	2	1.934	2	2
2_{2}^{1}	2.445	$2\frac{1}{2}$	2.436	$2\frac{1}{2}$	2.427	$2\frac{1}{2}$	2.418	$2\frac{1}{2}$	$2\frac{1}{2}$
3,	2.012	3,	2.898	3,	2.884	3	2.870	2 3 4	3
31/2	3.397	$3\frac{1}{2}$	3.381	$3\frac{1}{2}$	3·364 3·808	3 1/4	3.348	3 1	$ 3^{\frac{1}{2}} $
4 4 1 2	3·854 4·336	$3\frac{8}{4}$ $4\frac{1}{4}$	3.831	34	4.283	3 4	3.785	3 4	4,
5	4.783	$4\frac{4}{4}$	4·309 4·748	4 ¹ / ₄	4.713	4 ¹ / ₄	4·257 4·679	4 ⁴ / ₁	$4\frac{1}{2}$
51	5.260	5 ¹ / ₄	5.222	5 .	5.184	5 ¹	5.146	5 ¹ / ₄	5
5½ 6	5.697	5 1	5.649	5 ½ 5 ½	5.601	$\frac{51}{52}$	5.224	5 ¹ / ₂	5½ 6
6\frac{1}{2}	6.171	$\frac{51}{6\frac{1}{4}}$	6.110	6	6.067	6	6.016	6	$ 6_{\frac{1}{2}} $
7	6.598	$6\frac{1}{2}$	6.535	61/2	6.472	61/2	6.410	61	7
7 7½	7.069	7	7.000	7	6.933	7	6.866	$6\frac{8}{4}$	71/2
8	7.486	$\frac{7^{\frac{1}{2}}}{8}$	7.405	7 1 /2	7:325	71/4	7.247	71/4	8
81/2	7.953	8	7.866	73	7.781	7 3 4	7.697	7 8 4	81
9	8.361	81	8.260	81	8.165	81/4	8.066	8	9
$9^{\frac{1}{2}}$	8.823	8 3 4	8.717	83	8.613	81/2	8.210	$8\frac{1}{2}$	$9^{\frac{1}{2}}$
10	9.222	91	9.101	9	8.983	9	8.866	83	10
$10\frac{1}{2}$	9.681	93	9.554	$9\frac{1}{2}$	9.428	91/2	9.306	91	$10\frac{1}{2}$
II	10.041	10	9.927	10	9.787	$9\frac{3}{1}$	9.649	93	II
$\mathbf{II}\frac{1}{2}$	10.227	IO	10.376	101/2	10.528	10	10.083	IO	$\mathbf{II}_{\frac{1}{2}}^{1}$
12 12 ¹ / ₂	10.908	II	10.740	$10\frac{3}{4}$	10.22	107	10.415	102	12
13	11.359	113	1 :				11.164	103/4	121
13	11.732	114	11.538	$\begin{array}{c c} 11\frac{1}{2} \\ 12 \end{array}$	11.348	114	11.104		13
14	12.243	121	12 322	121	12.106	12	11.896	12	13½
14 5	12.088	13	12.758	123	12.233	121	12.314	121	14 ¹ / ₂
15	13.343	131	13.093	13	12.849	$12\frac{2}{3}$	12.612	121	15
151	13.784	133	13.524	131	13.271	131	13.025	13	15%
16	14.131	141	13.851	134	13.578	$13\frac{1}{2}$	13.313	131	16
16 ½	14.269	$14\frac{1}{2}$	14.278	$14\frac{1}{4}$	13.995	14	13.720	133	$\mathfrak{16}_{\overline{2}}$
17	14.908	15	14.292	141	14.292	$14\frac{1}{1}$	13.998	14	17
17½	15.341	154	15.018	15	14.704	144	14.400	$14\frac{1}{2}$	171/2
18	15.673	154	15.327	151	14.992	15	14.668	143	18
$18\frac{1}{2}$	16.103	16 ²	15.746	15 ³ / ₄	15.400	15 3	15.064	15	$18\frac{1}{2}$
19 19 ¹ / ₂	16·426 16·853	163	16.046 16.461	16	15.678 16.082	$15\frac{3}{4}$ 16	15.323	151	19
20	17.169	174	16.753	163	16.351	161	15.715 15.964	15\frac{3}{4}	19½ 20
201	17 109	$17\frac{1}{2}$	17.163	171	16.750	163	16.320	16±	20 ¹ / ₅
20 ₂	17.900	18	17'448	174	17.011	17	16.590	161	20 ₂
21	18.319	181	17.854	173	17.405	$17\frac{1}{2}$	16.972	17	$2I_{\frac{1}{2}}^{\frac{1}{2}}$
22	18.621	$18\frac{1}{2}$	18.130	184	17.658	$17\frac{3}{4}$	17.203	$17\frac{1}{4}$	22
$22\frac{1}{2}$	19.037	19	18.233	$18\frac{1}{2}$	18.047	18	17.580	$17\frac{1}{2}$	22½
23	19.331	19 ¹	18.801	183	18.292	$18\frac{1}{4}$	17.803	$17\frac{3}{4}$	23
$23\frac{1}{2}$	19.743	$19\frac{1}{3}$	19.200	194	18.677	183	18.174	181	$23\frac{1}{2}$
24	20.030	20	19,461	$19\frac{1}{2}$	18.914	19	18.389	181	24
241	20.439	$20\frac{1}{2}$	19.855	$19\frac{3}{4}$	19.294	194	18.755	183	241/2
25	20.720	203/4	20.109	20	19.23	$19\frac{1}{2}$	18.962	19	25

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase	$\frac{1}{2} \%$	Years' Purchase	$\frac{3}{4}\%$	Years' 2	%	Years' 2	$2\frac{1}{4}\%$	Years
251	21.125	21	20.499	$20\frac{1}{2}$	19.894	20	19:324	191	25½
26	21.399	$2I\frac{1}{2}$	20.746	$20\frac{3}{4}$	20.151	20	19.523	191	26
251/2	21.800	213	21.132	$2I\frac{1}{4}$	20.492	$20\frac{1}{2}$	19.880	20	25%
27	22.068	22	21.372	$2I_{\frac{1}{4}}$	20.707	$20\frac{3}{4}$	20.072	20	27
27 2	22.466	$22\frac{1}{2}$	21.754	$21\frac{3}{4}$	21.074	21	20.423	$20\frac{1}{2}$	$27\frac{1}{2}$
23	22.727	223/4	21.987	22	51.581	$2I_{\frac{1}{4}}$	20.608	201	28
23½	23.121	23	22.365	$22\frac{1}{4}$	21.644	$2I\frac{3}{4}$	20.955	21	28½
29	23.376	$23\frac{1}{2}$ $23\frac{3}{4}$	22.592	$22\frac{1}{2}$	21.844	$2I\frac{3}{4}$	21.135	$2I_{\frac{1}{4}}$	29
30	24.019	24	23.186	23	22.202	221	21.474	211	$29\frac{1}{2}$
301	24.404	241	23.226	231	22:396	$22\frac{1}{2}$	21.645	2134	30
31	24.646	243	23.770	$23\frac{1}{2}$ $23\frac{3}{4}$	22.750	$22\frac{3}{4}$	21.983	22	$30\frac{1}{2}$
311	25.031	25	24.136	24	22.938	23	22.147	221	31
32	25.267	251	24.344	241	23.468	$23\frac{1}{4}$ $23\frac{1}{2}$	22.638	$22\frac{1}{2}$ $22\frac{3}{4}$	31½
321	25.648	$25\frac{3}{4}$	24.707	243	23.813	$23\frac{3}{4}$	22.966	23	32 32 ¹ / ₂
33	25.879	26	24.908	25	23.989	24	23.118	23	33
333	26.257	261	25.267	251	24.329	241	23.441	$23\frac{1}{2}$	33 ¹ / ₂
34	26.482	261	25.462	$25\frac{1}{2}$	24.499	241	23.282	$23\frac{1}{2}$	34
343	26.856	263/4	25.817	25\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	24.835	243	23.905	24	34 ¹ / ₂
35	27.076	27	26.007	26	24.999	25	24.046	24	35
351	27.446	271	26.359	261	25.331	$25\frac{1}{4}$	24.360	241	$35\frac{1}{2}$
36 36 ¹ / ₂	27.661 28.028	27 ³ / ₄ 28	26.543	$26\frac{1}{2}$	25.489	$25\frac{1}{2}$	24.495	$24\frac{1}{2}$:6
37	28.237	281	26·890 27·069	27	25.817	$25\frac{3}{4}$	24.804	243	361/2
371	28.601	281	27.413	27	25.969	26	24.934	25	37
38	28.805	283	27.586	$27\frac{1}{2}$	26.294	261	25.539	254	37 ¹ / ₂
381	29.166	291	27.926	$\frac{27\frac{1}{2}}{28}$	26·441 26·761	$26\frac{1}{2}$	25.363	251	38
39	29.365	$29\frac{1}{1}$	28.095	28	26.903	26 3 4	25.664	25 3	$38\frac{1}{2}$
39 1/2	29.722	293	28.431	281	27.219	27 27 ½	25·783 26·079	25 ³ / ₄	39
40	29.916	30	28.594	281	27:355	$\frac{27\frac{1}{4}}{27\frac{1}{4}}$	26.194	26 ¹ / ₄	39½ 40
401	30.520	301	28.927	29	27.667	$\frac{-74}{27\frac{3}{4}}$	26.486	261	40 ¹ / ₂
41	30.459	301	29.085	29	27.799	$27\frac{3}{4}$	26.595	26½	40 ₂
$4I_{\frac{1}{2}}$	30.810	303	29.414	$29\frac{1}{2}$	28.107	28	26.883	27	41 d l d l
42	30.994	31	29.568	$29\frac{1}{2}$	28.235	281 i	2 6·988	27	42
421	31.342	311	29.893	30	28.539	$28\frac{1}{2}$	27.272	271	$42\frac{1}{2}$
43	31.866	$31\frac{1}{2}$	30.042	30	28.662	$28\frac{3}{4}$	27:372	271	43
43½ 44	32.041	$\frac{31\frac{3}{4}}{32}$	30.364	301	28.962	29	27.652	27 4	43½
44 44 ¹ / ₂	32.382	$\frac{3^2}{32\frac{1}{2}}$	30·508 30·826	301	29.080	29	27.748	27 8	44
45	32.22	$32\frac{1}{2}$	30.966	$30\frac{3}{4}$	29:376	$29\frac{1}{2}$	28°C23	28	$44\frac{1}{2}$
45\\\\	32.891	323	31.581	311	29.490	$29\frac{1}{2}$	28.115	28	45
46	33.026	33	31.416	314	29.783	29\frac{3}{4}	28.386	$28\frac{1}{2}$	45½
451	33.395	331	31.728	313	30.181	30 31 ½	28:474	$28\frac{1}{2}$	46
47	33.223	331	31.859	313	30.287	301	28·742 28·826	283 283	46½
47½	33.885	34	32.167	321	30.221	301	29.089	204	47 $47\frac{1}{2}$
48	34.043	34	32.294	321	30.673	308	29.170	29 ¹	4/2
481	34.371	341	32.598	321	30.954	31	29.429	294 295	48 ¹ / ₂
49 49 ¹ / ₂	34.850	$34\frac{1}{2}$	32.721	$32\frac{3}{4}$	31.052	31	29.206	29 ²	49
50 S	34·850 35·000	344	33.022	33	31.330	31½	29.761	293	49½
3- 1	33 000	35	33.141	33 1	31.424	$31\frac{1}{2}$	29.834	$29\frac{3}{4}$	50

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years'	1 0/	Years'	3.0/	Years'	20/	Years' O	1 0/1	Years
	Years' Purchase 1	2 %	Years' Purchase 1	4 %	Purchase	2%	Years' Purchase 2	4 %	Lears
51 52 53 54 55	35.468 35.929 36.383 36.831 37.271	$ 35^{\frac{1}{2}} 36 36^{\frac{1}{2}} 36^{\frac{3}{4}} 37^{\frac{1}{4}} $	33.554 33.960 34.358 34.750 35.135	$ \begin{array}{c} 33^{\frac{1}{2}} \\ 34 \\ 34^{\frac{1}{4}} \\ 34^{\frac{3}{4}} \\ 35^{\frac{1}{4}} \end{array} $	31.788 32.145 32.495 32.838 33.175	$ \begin{array}{c} 31\frac{3}{4} \\ 32\frac{1}{4} \\ 32\frac{1}{2} \\ 32\frac{3}{4} \\ 33\frac{1}{1} \end{array} $	30·156 30·470 30·778 31·079 31·373	$30\frac{1}{4}$ $30\frac{1}{2}$ $30\frac{3}{4}$ 31 $31\frac{1}{4}$	51 52 53 54 55
56 57 58 59 60	37·706 38·134 38·556 38·971 39·380	37 ³ / ₄ 28 ¹ / ₄ 38 ¹ / ₂ 39 39 ¹ / ₂	35.514 35.886 36.252 36.611 36.964	35½ 36 36½ 36½ 36½	33·505 33·828 34·145 34·456 34·761	33½ 33¾ 34¾ 34¾ 34¾ 34¾	31.660 31.942 32.217 32.486 32.749	$ 31\frac{3}{4} 32 32\frac{1}{4} 32\frac{1}{2} 32\frac{3}{4} $	56 57 58 59 60
61 62 63 64 65	39.784 40.181 40.572 40.958 41.338	39 ⁸ / ₄ 40 ¹ / ₂ 41 41 ¹ / ₄	37.311 37.652 37.987 38.317 38.641	$37\frac{1}{4}$ $37\frac{3}{4}$ 38 $38\frac{1}{4}$ $38\frac{3}{4}$	35.060 35.353 35.640 35.921 36.197	35 35 ¹ / ₄ 35 ³ / ₄ 36 36 ¹ / ₄	33.006 33.258 33.504 33.745 33.980	33 33 ¹ / ₄ 33 ¹ / ₂ 33 ⁸ / ₄ 34	61 62 63 64 65
66 67 68 69 70	41.712 42.081 42.444 42.802 43.155	$ 41\frac{3}{4} 42 42\frac{1}{2} 42\frac{3}{4} 43\frac{1}{4} $	38.959 39.272 39.579 39.881 40.178	39 39 ¹ / ₄ 39 ¹ / ₂ 40 40 ¹ / ₄	36·468 36·733 36·994 37·249 37·499	$ \begin{array}{r} 36\frac{1}{2} \\ 36\frac{3}{4} \\ 37 \\ 37\frac{1}{4} \\ 37\frac{1}{2} \end{array} $	34·211 34·436 34·656 34·871 35·082	34 ¹ / ₄ 34 ¹ / ₂ 34 ⁸ / ₄ 34 ⁸ / ₄ 35	66 67 68 69 70
71 72 73 74 75	43.502 43.845 44.182 44.514 44.842	$ \begin{array}{c} 43\frac{1}{2} \\ 43\frac{3}{4} \\ 44\frac{1}{4} \\ 44\frac{3}{4} \\ 44\frac{3}{4} \end{array} $	40.470 40.756 41.038 41.315 41.587	$ 40\frac{1}{2} \\ 40\frac{3}{4} \\ 41 \\ 41\frac{1}{4} \\ 41\frac{1}{2} $	37.744 37.984 38.220 38.451 38.677	$ \begin{array}{r} 37\frac{3}{4} \\ 38 \\ 38\frac{1}{4} \\ 38\frac{1}{2} \\ 38\frac{3}{4} \end{array} $	35·288 35·490 35·687 35·879 36·068	35 ¹ / ₄ 35 ¹ / ₂ 35 ³ / ₄ 36 36	71 72 73 74 75
76 77 78 79 80	45.164 45.482 45.795 46.103 46.407	$ \begin{array}{r} 45\frac{1}{4} \\ 45\frac{3}{2} \\ 45\frac{3}{4} \\ 46 \\ 46\frac{1}{2} \end{array} $	41.855 42.118 42.376 42.630 42.880	$ \begin{array}{c} 41\frac{3}{4} \\ 42 \\ 42\frac{1}{2} \\ 42\frac{3}{4} \\ 43 \end{array} $	38·899 39·117 39·330 39·539 39·745	39 39 39 1 39 2 39 39 39	36·252 36·432 36·609 36·781 36·950	36½ 36½ 36½ 36¾ 36¾	76 77 78 79 80
81 82 83 84 85	46.707 47.002 47.292 47.579 47.861	$ \begin{array}{c} 46\frac{3}{4} \\ 47 \\ 47\frac{1}{4} \\ 47\frac{1}{2} \\ 47\frac{3}{4} \end{array} $	43·125 43·366 43·603 43·836 44·065	43 43 ¹ / ₄ 43 ¹ / ₂ 43 ³ / ₄ 44	39.946 40.143 40.336 40.526 40.711	$ \begin{array}{c} 40 \\ 40 \\ 40 \\ 40 \\ 40 \\ 40 \\ 40 \\ 40 \\$	37·115 37·276 37·434 37·588 37·739	$ \begin{array}{r} 37 \\ 37\frac{1}{4} \\ 37\frac{1}{2} \\ 37\frac{1}{2} \\ 37\frac{3}{4} \end{array} $	81 82 83 84 85
86 87 88 89 90	48.139 48.412 48.682 48.948 49.210	48½ 48½ 48¾ 49 49¼	44 290 44 511 44 728 44 942 45 152	$ \begin{array}{r} 44\frac{1}{4} \\ 44\frac{2}{2} \\ 44\frac{3}{4} \\ 45 \\ 45\frac{1}{4} \end{array} $	40·893 41·072 41·247 41·419 41·587	4I 4I 4I 4I 4I 2I 2I 2I 2I 2I 2	37.886 38.031 38.172 38.310 38.445	38 38 38 ¹ / ₄ 38 ¹ / ₂ 38 ¹ / ₂	86 87 83 89 90
91 92 93 94 95	49.468 49.722 49.972 50.219 50.462	49½ 49¾ 50 50¼ 50½	45.358 45.561 45.760 45.956 46.148	45 ¹ / ₄ 45 ¹ / ₂ 45 ⁸ / ₄ 46 46 ¹ / ₄	41.752 41.914 42.072 42.228 42.380	$ \begin{array}{c cccc} 41\frac{3}{4} \\ 42 \\ 42 \\ 42\frac{1}{4} \\ 42\frac{1}{2} \end{array} $	38·577 38·706 38·832 38·956 39·077	38½ 38¾ 38¾ 39 39	91 92 93 94 95
96 97 98 99 100	50·702 50·938 51·170 51·399 51·625	50\frac{3}{4} 51 51\frac{1}{4} 51\frac{1}{2} 51\frac{3}{4}	46·337 46·523 46·706 46·885 47·061	46½ 46¾ 46¾ 47 47	42.529 42.676 42.820 42.960 43.098	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	39·195 39·310 39·423 39·534 39·642	39 ¹ / ₄ 39 ¹ / ₂ 39 ² / ₂ 39 ⁸ / ₄	96 97 98 99 100

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

	Years'	17.04	Years'	3.04	Years'	0.04		1.07)
Years	Purchase 2		Years' Purchase 2	4 %	Purchase	3%	Years' 3	1/2 %	Years
1/2 T	°494	$\frac{1}{2}$. 493	$\frac{1}{2}$	·493	$\frac{1}{2}$	·49I	$\frac{1}{2}$	$\frac{1}{2}$
I 1/2	'976 1'463	11/2	'973 1'460	I I 1 2	·971 1·456	I I 1 2	•966 1•449	I I 1 2	I
2	1.027	2	1 400	2	1.913	2	I .000	2	$\begin{bmatrix} \mathbf{I} \frac{1}{2} \\ 2 \end{bmatrix}$
2 ¹ ₂	2.409	$2\frac{1}{2}$	2.400	$2\frac{1}{2}$	2.391	$2\frac{1}{2}$	2.374	$2\frac{1}{4}$	$2\frac{1}{2}$
3	2.856	$2\frac{3}{4}$	2.842	$2\frac{3}{4}$	2.829	$2\frac{3}{4}$	2.802	$2\frac{3}{4}$	3
31/2	3.331	3 4	3.312	3 1	3.299	31	3.267	31/4	3½
4 4 ¹ / ₂	3.762 4.231	$3\frac{3}{4}$ $4\frac{1}{4}$	3.739 4.206	$3\frac{3}{4}$ $4\frac{1}{4}$	3.717 4.180	3 4	3.673 4.130	3 4	4
5	4.646	43/4	4.613	4 4 1 2	4.280	$4\frac{1}{4}$ $4\frac{1}{2}$	4.212	$4\frac{1}{4}$	4½ 5
5½ 6	5.100	5	5.072	5	5.036	5	4.964	5	51
6	5.208	51/2	5.462	$5\frac{1}{2}$	5.417	$5\frac{1}{2}$	5:329	5 ¹ / ₄	5½ 6
61/2	5.965	$\frac{6}{6\frac{1}{4}}$	5.915	6 6 ¹ / ₄	5.866	5 34	5.769	5 4	6 ₂ ¹
7 7½	6·349 6·800	$6\frac{3}{4}$	6·289 6·736	68/4	6·230 6·672	$6\frac{1}{4}$ $6\frac{3}{4}$	6·115 6·546	6 61 61	7,
8	7.170	71/4	7:094	7	7.020	7	6.874	63	7½ 8
85	7.615		7.534	$7\frac{1}{2}$	7.454	71/2	7.298	71/4	81/2
9	7.971	$\frac{7\frac{1}{2}}{8}$	7.878		7.786	7 3/4	7.608	$7\frac{1}{2}$	9
$9^{\frac{1}{2}}$	8.410	$8\frac{1}{2}$ $8\frac{3}{4}$	8.311	$8\frac{1}{4}$ $8\frac{3}{4}$	8.213	$8\frac{1}{4}$	8.023	8	$9^{\frac{1}{2}}$
10	8·752 9·185	91	8.640 9.066		8.530	$8\frac{1}{2}$	8·317 8·724	$8\frac{1}{4}$ $8\frac{3}{4}$	10
102	9.514	94 95	9.382	$9 \\ 9^{\frac{1}{2}}$	8·950 9·253	9 9 ¹ / ₄	9.002	9	$10\frac{1}{2}$
$\mathbf{II}_{\frac{1}{2}}^{\frac{1}{2}}$	9.941	10	9.802	$9\frac{3}{4}$	9.665	93/4	9.401	91	$II\frac{1}{2}$
12	10.528	104	10.104	no	9.954	10	9.663	$9\frac{3}{4}$	12
$12\frac{1}{2}$	10.679	103/4	10.218	$10\frac{1}{2}$	10.360	101	10.024	10	$\mathbf{I}2_{2}^{1}$
13 13 ¹ / ₂	10.983	II II ¹ / ₂	10.807	$10\frac{3}{4}$ $11\frac{1}{4}$	10.635	$10\frac{3}{4}$	10,303	104	13
14	11.601	I I 3	11 214		11.034 11.296	111	10.086	$10\frac{3}{4}$	13½
141	12.100	12	11.891	12	11.688	113	11.596	$II^{\frac{1}{4}}$	14 ¹ / ₂
15	12.381	$12\frac{1}{2}$	12.157	$12\frac{1}{4}$	11.938	12	11.212	$II\frac{\hat{1}}{2}$	15
151/3	12.785	$12\frac{3}{4}$	12.221	121	12.353	121	11.882	12	$15\frac{1}{2}$
16 16 ¹	13.055	13 13 ¹ / ₂	12.805	$12\frac{3}{4}$ $13\frac{1}{4}$	12.561	$12\frac{1}{2}$	12:094	12	16
17	13.412	133	13.435	13\frac{1}{2}	13.166	131	12.454	$12\frac{1}{2}$ $12\frac{3}{4}$	16½ 17
172	14.104	14	13.817	$13\frac{3}{4}$	13.238	$13\frac{1}{2}$	13.004	13	171
18	14.353	$14\frac{1}{4}$	14.049	14	13.754	133	13.100	$13\frac{1}{4}$	18
181	14.739	143	14'424	142	14.119	14	13.232	$13\frac{1}{2}$	$18\frac{1}{2}$
19 19 ¹ / ₂	14°979	15 15 ¹ / ₄	14.646	14 3 15	14.324	$14\frac{1}{4}$ $14\frac{3}{4}$	13.710	13 3 14	19 19 ¹ / ₂
20	15.289	$15\frac{1}{2}$	15.227	151	14.877	15	14.517	141	20
20½	15.964	16	15.291	$15\frac{1}{2}$	15.229	151	14.543	$14\frac{1}{2}$	$20\frac{1}{2}$
21	16.182	161	15.793	$15\frac{3}{4}$	15.415	152	14.698	144	21
21½ 22	16·554 16·765	$16\frac{1}{2}$ $16\frac{3}{4}$	16·150 16·344	$16\frac{1}{4}$	15.761	$15\frac{3}{4}$	15.021	15	$2I_{\frac{1}{2}}^{\frac{1}{2}}$
221	17.129	171	16.695	163	15.937 16.276	$16\frac{1}{4}$	15·167	$15\frac{1}{4}$ $15\frac{1}{2}$	$\frac{22}{22\frac{1}{2}}$
23	17:332	171	16.879	17	16.444	161	15.620	$15\frac{1}{2}$	23
$23\frac{1}{2}$	17.690	$17\frac{3}{4}$	17.225	$17\frac{1}{4}$	16.777	163	15.929	16	23 ¹ / ₂
24	17.885	18	17.401	171/2	16.936	17	16.058	16	24
24½ 25	18.238	$18\frac{1}{4}$ $18\frac{1}{2}$	17.740	$17\frac{3}{4}$ 18	17.262	171	16.361	161	$24\frac{1}{2}$
25	10 424 .)	102	1/900	10	17.413	17½	16.482	$16\frac{1}{2}$	25

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' 2	$\frac{1}{2}\%$	Years' 2	3 %	Years' 3	%	Years' 3	$\frac{1}{2}\%$	Years
		$\frac{2}{18\frac{3}{4}}$	18.242	181		$17\frac{3}{4}$		163	orl
25½ 26	18·772 18·951	104	18.402	181	17.734	18	16.777	17	25½ 26
26½	19.293	191	18.730	$18\frac{3}{4}$	18.192	181	17.179	171	261
27	19.464	192	18.883	19	18.327	181	17.285	174	27
271	19.801	19\frac{3}{4}	19.206	$19\frac{1}{4}$	18.636	$18\frac{3}{4}$	17.568	172	27 ½
28	19.965	20	19.351	191	18.764	183	17.667	173	28
$28\frac{1}{2}$	20:297	$20\frac{1}{4}$ $20\frac{1}{6}$	19.806	$19\frac{3}{4}$ $19\frac{3}{4}$	19.067	19	17.943	18	281 29
29 ¹ / ₂	20.454	$20\frac{5}{2}$	20.118	20	19.485	194	18.302	181	29 29 ¹ / ₅
30	20.930	21	20.249	20 ¹ / ₄	19.600	$19\frac{1}{2}$	18.392	$18\frac{1}{2}$	30
$30\frac{1}{2}$	21.252	$2I\frac{1}{4}$	20.555	$20\frac{1}{2}$	19.892	20	18.656	183	30½
31	21.395	$21\frac{1}{2}$	20.681	$20\frac{3}{4}$	20,000	20	18.736	$18\frac{3}{4}$	31
$31\frac{1}{2}$	21.712	$2I\frac{3}{4}$	20.981	21	20.286	$20\frac{1}{4}$	18.994	19	311/2
32	21.849 22.160	$21\frac{3}{4}$ $22\frac{1}{4}$	21.396 21.100	$2I$ $2I\frac{1}{2}$	20.389	$20\frac{1}{2}$ $20\frac{3}{4}$	19.320	19 19 ¹ / ₄	32 32 ¹ / ₂
321/2	22.202	$22\frac{1}{4}$	21.509	$2I\frac{1}{2}$	20.766	$20\frac{3}{4}$	19 320	194	33
33 33 ¹ / ₂	22.598	$22\frac{1}{2}$	21.799	$21\frac{2}{3}$	21.040	21	19.636	108	$\frac{33^{\frac{1}{2}}}{33^{\frac{1}{2}}}$
34	22.724	22 3 4	21.906	22	21.132	$2I\frac{1}{4}$	19.401	193	34
34½	23.025	23	22.131	$22\frac{1}{4}$	21.401	$2I\frac{1}{2}$	19.941	20	341/2
35	23'145 .	$23\frac{1}{4}$	22.293	221	21.487	$2I\frac{1}{2}$	20.001	20	35
35½	23.442	$23\frac{1}{2}$	22.273	$22\frac{1}{2}$	21.751	$2I\frac{3}{4}$	20.232	201	352
36 36½	23.556	$23\frac{1}{2}$ $23\frac{3}{4}$	22.670	$22\frac{3}{4}$ 23	21.832	$21\frac{3}{4}$ 22	20.210	$20\frac{1}{4}$ $20\frac{1}{6}$	36 36½
302	23.646	234	23.036	23	22.167	221	20.211	$20\frac{1}{2}$	37
$37\frac{1}{2}$	24.544	241	23.306	$23\frac{1}{4}$	22.421	$22\frac{1}{2}$	20.794	$20\frac{3}{4}$	$37\frac{1}{2}$
38	24.349	$24\frac{1}{4}$	23.393	$23\frac{1}{2}$	22.492	$22\frac{1}{2}$	20.841	$20\frac{3}{4}$	38
38½	24.631	243	23.658	$23\frac{3}{4}$	22.741	$22\frac{3}{4}$	21.059	21	381
39	24.730	243	23.740	23 4	22.808	22 4	21.103	21	39
39½ 40	25.008	25 25	24.000 24.078	24	23.025	23	21.312	$2I_{\frac{1}{4}}^{\frac{1}{4}}$	39½ 40
401	25.376	$25\frac{1}{2}$	24.334	24	23.323	$23\frac{1}{4}$	21.263	211	40½
41	25.466	$25\frac{1}{2}$	24'407	241	23.412	$23\frac{1}{2}$	21.200	211	41
411/2	25.735	$25\frac{3}{4}$	24.658	$24\frac{3}{4}$	23.646	$23\frac{3}{4}$	21.802	$21\frac{3}{4}$	$41\frac{1}{2}$
42	25.821	$25\frac{3}{4}$	24.727	$24\frac{3}{4}$	23.401	$23\frac{3}{4}$	21.835	$21\frac{3}{4}$	42
42½	26.085	26	24.973	25	23.930	24	22.033	22	422
43	26·166 26·426	$26\frac{1}{4}$ $26\frac{1}{6}$	25.038 25.280	25 $25\frac{1}{4}$	23.982	24 24 ¹ / ₁	22.063	$\frac{22}{22\frac{1}{4}}$	43
43½ 44	26.504	26½	25'341	$25\frac{1}{4}$	24 200	$24\frac{1}{4}$	22.583	$22\frac{1}{4}$	43½
44 1	26.760	263/4	25.24	251	24.474	241	22.471	$22\frac{1}{2}$	441
45	26.833	$26\frac{3}{4}$	25.636	$25\frac{3}{4}$	24.219	$24\frac{1}{2}$	22 495	$22\frac{1}{2}$	45
451	27.084	27	25.869	$25\frac{3}{4}$	24.734	243	22 679	223	45½
46	27.154	$27\frac{1}{4}$	25.924	26	24.775	243/4	22.701	2234	46
46½	27.40I 27.467	271	26.1203	261	24.986	25	22.880	23	46\frac{1}{2}
47 47½	27.407	$27\frac{1}{2}$ $27\frac{3}{4}$	26.427	261	25 025 25 231	25 $25\frac{1}{4}$	23.074	23	47 47 ¹ / ₂
48	27.773	$27\frac{3}{4}$	26.475	261	25.267	25½	23.001	23	48
48 ½	28.013	28	26.695	$26\frac{3}{4}$	25.469	$25\frac{1}{2}$	23.561	$23\frac{1}{1}$	481
49	28.071	28	26.740	$26\frac{3}{4}$	25.202	251	23.277	$23\frac{1}{4}$	49
492	28.306	281	26.955	27	25.700	$25\frac{3}{4}$	23.443	$23\frac{1}{2}$	$49\frac{1}{2}$
50	28.362	281/4	26.997	27	25.730	25\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	23.456	$ 23\frac{1}{2}$	50

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $\mathbf{1}_{\frac{1}{2}}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

	Years'	1	1 Vegral		Vann'				1
Years	Years' Purchase	$\frac{1}{2}\%$	Years' Purchase 2	34%	Years' Purchase	3 %	Years' Purchase	3 1/3 %	Years
51	28.646	283	27.248	271	25.951	26	23.629	233	51
52	28.923	29	27.492	$27\frac{1}{2}$	26.166	$26\frac{1}{4}$	23.796	$23\frac{3}{4}$	52
53	29.193	291	27.729	$27\frac{3}{4}$	26.375	$26\frac{1}{4}$	23.957	24	53
54	29.457	$29\frac{1}{2}$	27.960	28	26.578	$26\frac{1}{2}$	24.113	24	54
55	29.714	29\frac{3}{4}	28.182	$28\frac{1}{4}$	26.774	$26\frac{3}{4}$	24.264	241	55
56	29.965	30	28.404	$28\frac{1}{2}$	26.965	27	24.410	$24\frac{1}{2}$	56
57	30.510	301	28.617	$28\frac{1}{2}$	27.121	271	24.250	241	57 58
58	30°448 30°681	$30\frac{1}{2}$	28.825	$28\frac{3}{4}$	27:331	271	24.686	243	58
59 60	30.000	304	29.026	29	27·506 27·676	$27\frac{1}{2}$ $27\frac{3}{4}$	24.818	244	59 60
61		-		294			24.945	25	61
62	31.347	$31\frac{1}{4}$ $31\frac{1}{4}$	29.414	$29\frac{1}{2}$ $29\frac{1}{2}$	27·840 28·000	$\frac{27\frac{3}{4}}{28}$	25.067	25	62
63	31.228	$31\frac{1}{2}$	29 000	$29\frac{1}{2}$	28.126	281	25.186	25½ 25½	63
64	31.764	314	29,957	30	28.306	281	25·300 25·411	$25\frac{1}{2}$	64
65	31.965	32	30.158	301	28.453	$28\frac{1}{2}$	25.218	$25\frac{1}{2}$	65
66	32.161	321	30.292	30\frac{1}{4}	28.595	281	25.621	$25\frac{1}{2}$	66
67	32.352	324	30.458	301	28.733	283	25.721	$25\frac{3}{4}$	67
68	32.538	$32\frac{1}{2}$	30.616	$30\frac{1}{2}$	28.867	283	25.817	25 3/4	68
69	32.720	$32\frac{3}{4}$	30.770	303	28.997	29	25.910	26	69
70	32.898	33	30.919	31	29.123	29	26.000	26	70
71	33.071	33	31.062	31	29.246	291	26.087	26	71
72	33.540	331	31.502	314	29.365	291	26.171	26½	72
73	33.402	33 2	31.342	314	29.481	$29\frac{1}{2}$	26.253	264	73
74	33.266	33 2	31.479	31\frac{1}{2}	29.593	$29\frac{1}{2}$	26.331	261	74
75	33.723	334	31.610	$31\frac{1}{2}$	29.702	294	26.407	$26\frac{1}{2}$	75
76	33.876	34	31.737	313	29.808	$29\frac{3}{4}$	26.480	$26\frac{1}{2}$	76
77 78	34.025	34,	31.861	314	29.910	30	26.551	$26\frac{1}{2}$	77 78
79	34.313	344	31.982	32	30.010	30	26.68%	$26\frac{1}{2}$ $26\frac{3}{4}$	
80	34.452	$34\frac{1}{2}$	32.099	32 321	30.101	30 30 ¹ / ₄	26.685 26.749	20 2 26 3	79 80
81	34.587	$34\frac{1}{2}$		321	30.501		26.810	263	81
82	34.719	342	32·324 32·432	321	30.381	$30\frac{1}{4}$ $30\frac{1}{2}$	26.870	263	82
83	34.848	344	32.537	$32\frac{1}{2}$	30.467	301	26.928	27	83
84	34.974	35	32.640	$3^{-\frac{3}{4}}$	30.220	$30\frac{1}{2}$	26.983	27	84
85	35.096	35	32.739	323	30.631	30 3	27.037	27	85
86	35.216	354	32.836	323	30.710	303	27.089	27	86
87	35.333	354	32.931	33	30.786	303	27.139	27 ¹ / ₄	87
88	35.446	$35\frac{1}{2}$	33.023	33	30.860	303	27.187	$27\frac{1}{4}$	88
89	35.257	$35\frac{1}{2}$	33.115	33,	30.932	31	27.234	274	89
90	35.666	$35\frac{3}{4}$	33.199	$33\frac{1}{4}$	31.005	31	27.279	274	90
91	35.771	354	33.284	33 1/2	31.070	31	27:323	$27\frac{1}{4}$	91
92	35.875	354	33.366	334	31.136	314	27.365	271	92
93	35.975	36 36	33.447	$33\frac{1}{2}$	31.500	314	27.406	27 1/2	93
94	36·073	36 ¹	33.525	$33\frac{1}{2}$	31.262	314	27.445	27 =	94
95	36.263	$36\frac{1}{4}$	33.601	33½	31.323	311	27.484	$27\frac{1}{2}$	95
96	36.354	361	33·675 33·746	$33\frac{3}{4}$ $33\frac{3}{4}$	31.381	$31\frac{1}{2}$	27.520	$27\frac{1}{2}$	96
97 98	36.443	$36\frac{1}{2}$	33.817	$33\frac{3}{4}$	31.438	$31\frac{1}{2}$ $31\frac{1}{2}$	27·556 27·590	$27\frac{1}{2}$	97 98
99	36.529	$36\frac{1}{2}$	33.885	34	31 493	$31\frac{1}{2}$	27.623	$27\frac{1}{2}$ $27\frac{1}{2}$	99
100	36.614	36½	33.951	34	31.299	$31\frac{1}{2}$	27.655	$\frac{2}{2}$	100
)			00 75		3 377	3.2	,	2/4	

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase	1 %	Years' 4	$\frac{1}{2}\%$	Years' Purchase	5 %	Years' Purchase	6 %	Years
$\frac{1}{2}$	*490	$\frac{1}{2}$	•489	$\frac{1}{2}$	·488	$\frac{1}{2}$	·485	$\frac{1}{2}$	1/2
I,	•962	I	. 957	1	.952	I	*943	I	I
\mathbf{I}_{2}^{1}	I '442	1 ½ 2	1.435	$\frac{1\frac{1}{2}}{1\frac{3}{4}}$	1.428	$\frac{1\frac{1}{2}}{1\frac{3}{4}}$	1.414 1.833	$I\frac{1}{2}$ $I\frac{3}{4}$	\mathbf{I}_{2}^{1}
2 2 ¹ / ₂	1.886 2.357	2 2 ¹ / ₄	1.873 2.340	2 1 d	2.353	2 ¹ / ₄	2.290	21	2 2 ¹ / ₂
200	2.775	$\frac{24}{2\frac{3}{4}}$	2 340	2 3 4	2.723	2 ³ / ₄	2.673	23	
3 3 ¹ / ₂	3.536	$\frac{24}{3\frac{1}{4}}$	3.202	$3\frac{1}{4}$	3.175	31/4	3.112	3	3 3 ¹ / ₂
4	3.630	3 1	3.588	$\frac{3\frac{1}{2}}{3\frac{1}{2}}$	3.546	$\frac{3\frac{1}{2}}{3\frac{1}{2}}$	3.465	$3\frac{1}{2}$	4
4½	4.081	4	4.033	4	3.985	4	3.893	4	4 ¹ / ₂
5	4.452	$4\frac{1}{2}$	4.390	$4\frac{1}{2}$	4.329	41	4.515	41	5
5½ 6	4.893	5	4.825	4 ³ / ₄	4.757	$4\frac{3}{4}$	4.626	43	5½ 6
6	5.242	5 ¹ / ₄	5.128	51	5.076	5	4.917	5	6
6_{2}^{1}	5.674	5 ³ / ₄	5.285	$5^{\frac{1}{2}}$	5.492	5 1/2	5.317	54	6½
7	6.002	61	5.893	6	5.786	5 4 6 1	5.282	$\frac{5^{\frac{1}{2}}}{6}$	7,
$7^{\frac{1}{2}}$	6.425	$6\frac{1}{2}$ $6\frac{3}{4}$	6.306	61	6.101	61	6.310 6.310	61/4	71/2
8 8 ¹ / ₂	6·733 7·146	71	6·596 6·999	$6\frac{1}{2}$ 7	6·463 6·856	$6\frac{1}{2}$	6.210	$6\frac{1}{2}$	8 8 8
9	7.435	7½	7.269	. 7 [‡]	7.108	7	6.802	$6\frac{3}{4}$	9
9 9 ¹ / ₂	7 433	73	7.661	73	7.489	$7\frac{1}{2}$	7.162	74	9 9
10	8.111	$\frac{7\frac{3}{4}}{8}$	7.913	$\frac{7\frac{3}{4}}{8}$	7.722	$7\frac{3}{4}$	7:360	71	10
101	8.506	81	8.295	81	8.092	8	7.708	73/4	101
II	8.760	83	8.529	81/2	8.306	81	7.887	8	II
$\mathbf{II}_{\overline{2}}^{1}$	9.146	$9^{\hat{1}}_{4}$	8.901	9	8.666	8 <u>3</u>	8.222	81	$II_{\frac{1}{2}}^{1}$
12	9.385	$9^{\frac{1}{2}}$	9.119	9.	8.863	8\frac{3}{4}	8.384	$8\frac{1}{2}$	12
$\mathbf{I2}_{2}^{1}$	9.762	$9^{\frac{3}{4}}$	9.481	$9^{\frac{1}{2}}$	9,515	94	8.707	834	$12\frac{1}{2}$
13	9.986	10	9.683	91	9.394	$9\frac{1}{2}$	8.853	834	13
$13\frac{1}{2}$	10.323	$IO_{\frac{1}{4}}^{1}$	10.036	IO	9.732	$9\frac{3}{4}$	9.164	94	$13\frac{1}{2}$
14 14 ¹ / ₂	10.253	$10\frac{1}{2}$	10.223	$10\frac{1}{4}$ $10\frac{1}{2}$	9.899	10 101/4	9°295 9°594	9½ 9½	14 14 ¹ / ₂
15	11.118	II	10.740	102	10.380	101	9 394	$9^{\frac{3}{4}}$	15
15½	11.469	II	11.074	II	10.698	103	10.000	10	 15⅓
16	11.652	$11\frac{3}{4}$	11.574	111	10.838	103	10.109	IO	162
161	11.991	12	11.229	$II\frac{1}{2}$	11.146	114	10.383	102	161
17	12.166	$12\frac{1}{4}$	11.404	$11\frac{3}{4}$	11.274	$II\frac{1}{4}$	10.477	$10\frac{1}{2}$	17
$17\frac{1}{2}$	12.499	$12\frac{1}{2}$	12.023	12	11.223	$II\frac{1}{2}$	10.744	103	17½
18	12.659	123	12.160	$12\frac{1}{4}$	11.690	$11\frac{3}{4}$	10.828	103	18
$18_{\overline{2}}^{1}$	12.985	13	12.467	$12\frac{1}{2}$	11.979	12	11.084	II	$18\frac{1}{2}$
19	13.134	$13\frac{1}{4}$	12.593	$12\frac{1}{2}$	12.085	12	11.128	114	19
19½ 20	13.451	132	12.891	13	12.365	121	11.404	$\begin{array}{c c} II\frac{1}{2}\\ II\frac{1}{2} \end{array}$	19½ 20
	13.290	13½		13		123	11.706	113	
$20\frac{1}{2}$	13.900	14	13.405	$13\frac{1}{4}$ $13\frac{1}{2}$	12.733	124	11.764	113	$20\frac{1}{2}$
$2I^{\frac{1}{2}}$	14.331	14	13.686	$13\frac{3}{4}$	13.083	13	11.001	12	21 2
22	14.421	141/2	13.784	$13\frac{3}{4}$	13.163	131	12.042	12	22
22 ½	14.745	14 1	14.058	14	13.417	$13\frac{1}{2}$	12.259	$12\frac{1}{4}$	$22\frac{1}{2}$
23	14.857	143	14.148	141	13.489	131	12.303	$12\frac{1}{4}$	23
231	15.143	15 1	14.413	$14\frac{1}{2}$	13.734	133	12.212	$12\frac{\hat{1}}{2}$	232
24	15.247	151	14.492	$14\frac{1}{2}$	13.799	133	12.220	121	24
24½	15.26	151	14.753	$14\frac{3}{4}$	14.036	14	12.751	123	24
25	15.622	15½	14.828	$14\frac{3}{4}$	14.094	14	12.783	123	25

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at \mathbf{R} stes from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase	4 %	Years' Z	$\frac{1}{2}\%$	Years' Purchase	5 %	Years' Purchase	6 %	Years
25½ 26	15.894	16	15.078	15	14.323	$14\frac{1}{4}$ $14\frac{1}{4}$	12.976	13	25 ¹ 26
26½	16.248	161	15.389	$15\frac{1}{2}$	14.297	$14\frac{1}{2}$	13.182	131	26½
27 27 ¹ / ₂	16·330 16·587	161/2	15·451 15·686	$15\frac{1}{2}$ $15\frac{3}{4}$	14.643	$14\frac{3}{4}$ $14\frac{3}{4}$	13.387	$13\frac{1}{4}$ $13\frac{1}{2}$	27 27 ¹ / ₂
28	16.663	163	15.743	154	14.898	15	13.406	131/2	28
28½	16.914 16.984	17	15.971 16.022	16	15.102	15	13.575	131	28½
29 29 ¹ / ₂	17.228	17 17 ¹ / ₄	16.243	161	15.141	15 ¹ / ₄	13.221	$13\frac{1}{2}$ $13\frac{3}{4}$	29 29 ¹ / ₂
30	17.292	171	16.289	161	15.372	154	13.765	$13\frac{3}{4}$	30
30 2	17.530	17½ 17½	16·503 16·544	16½	15.262	$15\frac{1}{2}$ $15\frac{1}{2}$	13.920	14	30½ 31
$3I_{\frac{1}{2}}^{\frac{1}{2}}$	17.820	174	16.752	$16\frac{3}{4}$	15.779	$15\frac{3}{4}$	14.078	14	$3^{1}\frac{1}{2}$
32 32½	17.874	174	16·789	16 3 17	15.803	154	14.084 14.226	14 14 ¹ / ₄	32 32 ¹ / ₂
33	18.148	181	17.023	17	16.003	16	14 220	141	33
332	18·367 18·411	181	17.218	171	16.176	161	14.367	141	$33\frac{1}{2}$
34 34 ¹ / ₂	18.624	18½ 18½	17.247	17\frac{1}{4}	16.360	16½	14.368	$14\frac{1}{4}$ $14\frac{1}{2}$	34 34 ¹ / ₂
35	18.665	$18\frac{3}{4}$	17.461	$17\frac{1}{2}$	16.374	161	14.498	$14\frac{1}{2}$	35
35½ 36	18·872 18·908	183/4	17·644 17·666	$17\frac{3}{4}$ $17\frac{3}{4}$	16·536 16·547	$16\frac{1}{2}$	14·623 14·621	$14\frac{1}{2}$ $14\frac{1}{2}$	35½ 36
36½	10.110	19	17.843	$17\frac{3}{4}$	16.702	$16\frac{3}{4}$	14 021	$14\frac{3}{4}$	361
37 37½	19.143	191	17·862 18·034	17 3 18	16·711 16·861	$16\frac{3}{4}$	14.737	143	37
38	19.368	191	18.034	18	16.868	163	14.851	143/4	37½ 38
381	19.558	191	18.319	181	17.013	17	14.955	15	$38\frac{1}{2}$
39 39 ¹ / ₂	19.584	19\frac{1}{3}	18.391	$18\frac{1}{4}$	17.017	17 17 ¹ / ₄	14.949	15	39 39 ¹ / ₂
40	19.793	193	18.402	$18\frac{1}{2}$	17.159	174	15.046	15	40
40½ 41	19.973	20 20	18.557	$18\frac{1}{2}$ $18\frac{1}{2}$	17·294 17·294	$17\frac{1}{4}$ $17\frac{1}{4}$	15.146	151	$40\frac{1}{2}$
$4I_{\frac{1}{2}}^{\frac{1}{2}}$	20.168	$20\frac{1}{20\frac{1}{4}}$	18.417	183	17.424	$17\frac{1}{2}$	15.138	15½	41 413
42 42 ¹ / ₂	20·356	201	18·724 18·869	$18\frac{3}{4}$ $18\frac{3}{4}$	17:423	$17\frac{\overline{1}}{2}$	15.225	151	42
43	20.371	$20\frac{1}{4}$ $20\frac{1}{4}$	18.874	$18\frac{3}{4}$	17.548	$17\frac{1}{2}$ $17\frac{1}{2}$	15.306	151	42½ 43
43½	20.236	202	19.012	19	17.666	$17\frac{3}{4}$	15.393	$15\frac{1}{2}$	43 ¹ / ₂
44 44 ¹ / ₂	20·549 20·739	$20\frac{1}{2}$ $20\frac{3}{4}$	19.122	19 19 ¹	17.663	17 ³ / ₄	15·383 15·466	$15\frac{1}{2}$ $15\frac{1}{2}$	44 44 ¹ / ₂
45	20.720	$20\frac{3}{4}$	19.126	191	17.774	$17\frac{3}{4}$	15.456	$15\frac{1}{2}$	442
45½ 46	20·876 20·885	2I 2I	19·288	191	17.886 17.880	18	15.235	151	45½
46 ¹ / ₂	21.036	21	19.416	$19\frac{1}{4}$	17.988	18	15.24 15.600	$15\frac{1}{2}$ $15\frac{1}{2}$	46 46 ¹ / ₂
47	21.043	21	19.415	192	17.981	18	15.289	$15\frac{1}{2}$	47
47½ 48	21.190	$2I\frac{1}{4}$ $2I\frac{1}{7}$	19.538	19½	18.085	18	15.661 15.650	$15\frac{3}{4}$ $15\frac{3}{4}$	47½ 48
48½	21.338	$2I_{\frac{1}{4}}^{\frac{1}{4}}$	19.655	193	18.177	181	15.719	$15\frac{3}{4}$	40 48½
49 49 ¹ / ₂	21.341	$2I_{\frac{1}{4}}^{\frac{1}{4}}$ $2I_{\frac{1}{2}}^{\frac{1}{4}}$	19.651 19.767	$19\frac{3}{4}$ $19\frac{3}{4}$	18.169	$18\frac{1}{4}$ $18\frac{1}{4}$	15.708	$15\frac{3}{4}$	49
50	21.482	$\begin{array}{c c} 21\frac{1}{2} \\ 21\frac{1}{2} \end{array}$	19.762	194	18.256	181	15.773 15.762	15 ³ / ₄	49½ 50

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

77	Years'	1 0/ 1	Years' A	1 0/	Years'	5 0/1	Years'	3 % 1	Years
Years	Purchase 2	1 %	Years' 4	$\frac{1}{2}\%$		5 %	I di ciidiso		rears
51	21.617	$2I\frac{1}{2}$	19.868	193	18.339	184	15.813	$15\frac{3}{4}$	51
52	21.748	21 3	19.969	20	18.418	18½	15.907	15% 16	52
53	21.873	$21\frac{3}{4}$ 22	20.066	20 20 ¹ / ₁	18·493 18·565	$18\frac{1}{2}$	15.950	16	53 54
54 55	21.993	22	20.248	201	18.633	183	15.991	16	55
56	22.220	221	20.333	201	18.699	183	16.029	16	56
57	22.327	$22\frac{1}{4}$	20.414	$20\frac{1}{2}$	18.761	$18\frac{3}{4}$	16.065	16	57
57 58	22.430	$22\frac{1}{2}$	20.492	$20\frac{1}{2}$	18.820	$18\frac{3}{4}$	16.099	16	58
59	22.528	$22\frac{1}{2}$	20.567	201	18.876	19	16.131	161	59
60	22.623	$22\frac{1}{2}$	20.638	$20\frac{3}{4}$	18.929	19	16.191	161	60
61	22.715	223	20.706	203	18.980	19	16.190	101	61
62	22.803	223/4	20.772	$20\frac{3}{4}$	19.029	19	16·217 16·242	16 ¹	62
63	22.887	23	20.834	$20\frac{3}{4}$	19.075	19	16.266	161	63
64	22.969	23	20.894 20.951	2 I 2 I	10.161	19	16.580	161	65
66	23.047	23	21.006	21	19.501	191	16.310	161	66
67	23.122	23 23 ¹ / ₄	21.058	2 I	19.239	191	16.331	161	67
68	23.264	$23\frac{1}{4}$	21.108	21	19:275	19	16.320	161	68
69	23.330	$23\frac{1}{4}$	21.156	$2I_{\frac{1}{4}}$	19.310	191	16.368	164	69
70	23.395	231	21.505	211	19.343	191	16.382	$16\frac{1}{2}$	70
71	23.456	$23\frac{1}{2}$	21.246	$2I^{\frac{1}{4}}$	19.374	191	16.401	$16\frac{1}{2}$	71
72	23.216	$23\frac{1}{2}$	21.288	$2I_{\frac{1}{4}}$	19.404	192	16.412	161	72
73	23.273	231/2	21.328	211	19.432	19\frac{1}{2}	16.430	161	73
74	23.628	234	21.367	214	19.459	192	16.443 16.456	16½ 16½	74
75	23.680	234	21.404	$2I\frac{1}{2}$	19.485	192	16.468	161	75
76	23.731	23 3	21.439	$2I_{\frac{1}{2}}^{\frac{1}{2}}$	19.509	$19\frac{1}{2}$ $19\frac{1}{2}$	16.479	161	77
77 78	23.780	$23\frac{3}{4}$ $23\frac{3}{1}$	21.473	$2I\frac{1}{2}$	19.533	192	16.490	16;	78
79	23.872	234	21.236	$2I_{\frac{1}{2}}^{\frac{1}{2}}$	19.576	192	16.200	161	79
80	23.915	24	21.262	$21\frac{1}{9}$	19.596	191	16.509	$16\frac{1}{2}$	80
81	23.957	24	21.594	211	19.616	191	16.218	161	81
82	23.997	24	21.621	$21\frac{2}{3}$	19.634	193	16.526	$16\frac{1}{2}$	82
83	24.036	24	21.647	213	19.651	193	16.534	$16\frac{1}{2}$	83
84	24.073	24	21.671	213	19.668	193	16.542	161	84
85	24.109	24	21.695	$21\frac{3}{4}$	19.684	194	16.249	161	85
86	24.143	241	21.718	$21\frac{3}{4}$	19.699	$19\frac{3}{4}$	16.256	$16\frac{1}{2}$	86
87	24.176	244	21.740	213	19.713	193	16·562 16·568	$16\frac{1}{2}$	87 88
88	24.238	241	21.760	$21\frac{3}{4}$ $21\frac{3}{1}$	19.727	1934	16.573	$16\frac{1}{5}$	89
90	24 230	$24\frac{1}{4}$ $24\frac{1}{4}$	21.799	213	19.752	194	16.579	161	90
91	24.295	241	21.817	213	19.764	193	16.584	161	91
92	24 293	241	21.835	213	19.775	193	16.588	161	92
93	24.349	241	21.852	$2I\frac{3}{4}$	19.786	19	16.593	$16\frac{1}{2}$	93
94	24.374	$24\frac{1}{4}$	21.868	$21\frac{3}{4}$	19.796	193	16.597	$16\frac{1}{2}$	94
95	24.398	$24\frac{1}{2}$	21.883	22	19.806	194	16.601	$16\frac{1}{2}$	95
96	24.421	$24\frac{1}{2}$	21.897	22	19.815	19\frac{3}{4}	16.605	161	96
97	24.443	241/2	21.911	22	19.824	193	16.608	161	97
98	24.465	$24\frac{1}{2}$	21.925	22	19.832	194	16.611	161	98
99	24.485	241	21.938	22	19.840	193	16.618	$16\frac{1}{2}$ $16\frac{1}{2}$	99
100	24.20	$24\frac{1}{2}$	21.950	42	19 040	194	10 010	102	1 200

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' Purchase	7 %	Years' Purchase	3 %	Years' Purchase	9 %	Years' Purchase	LO %	Years
$\frac{1}{2}$	•483	$\frac{1}{2}$	•481	$\frac{1}{2}$.478	1/2	°476	1 2	1/2
I	·935	I	•926	1	.917	I	•909	I	I
$\mathbf{I}_{\frac{1}{2}}^{\frac{1}{2}}$	1'401	$\frac{1\frac{1}{2}}{1\frac{3}{4}}$	1.388	$1\frac{1}{2}$	1.374	11/4	1.362	I 1/4	$\mathbf{I}_{\frac{1}{2}}^{\frac{1}{2}}$
2 2 ¹ / ₂	1.808 2.258	2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.783 2.226	$\frac{1\frac{3}{4}}{2\frac{1}{4}}$	1.759 2.195	$\frac{1\frac{3}{4}}{2\frac{1}{4}}$	1.736 2.165	1 3 4 2 1 2 1 4	2 2 ¹ / ₂
3	2.624	2½ 2½	2.577	$\frac{24}{2}$	2.231	21/2 21/2	2.487	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	3
3 ¹ / ₂	3.057	3	3.001	3	2.946	3	2.893	3	$\frac{3}{3\frac{1}{2}}$
4	3.387	$\frac{31}{3\frac{1}{2}}$	3.315	$\frac{3}{3^{\frac{1}{4}}}$	3.540	31/4	3.140	31/4	4
41/2	3.804	3 1	3.718	3 3 4	3.634	3 1	3.224	$3\frac{1}{2}$	$4\frac{1}{2}$
5	4.100	4	3.993	4.	3.890	4	3.791	3 3 4	5
5½ 6	4.201	$4\frac{1}{2}$	4.380	$4\frac{1}{2}$	4.264	44	4.123	44	5½ 6
61	4·767 5·151	4 ³ / ₄ 5 ¹ / ₄	4.623	4½ 5	4·486 4·841	$\frac{4\frac{1}{2}}{4\frac{3}{4}}$	4°355 4°697	4 ⁴ / ₄	6 _{1/2}
7	5.389	$\frac{54}{5\frac{1}{2}}$	5.506	$\frac{5}{5\frac{1}{4}}$	5.033	5	4.868	44 4 4 4 4 4	7
$7\frac{1}{2}$	5.759	$5\frac{3}{4}$	5.229	$5\frac{1}{2}$	5.370	5 1	5.190	51	$7\frac{1}{2}$
8	5.971	6	5.747	$5\frac{3}{1}$	5.232	$5\frac{1}{2}$	5:335	51/4	8
$8\frac{1}{2}$	6.326	61	6.083	6	5.854	5 3 4	5.637	5 3 4	$8\frac{1}{2}$
9	6.212	62	6.247	61	5.995	6	5.759	54	9
9½ 10	6·855 7·024	6 ³ / ₄	6·567 6·710	$6\frac{1}{2}$ $6\frac{3}{4}$	6·297	$6\frac{1}{4}$ $6\frac{1}{2}$	6.043 6.142	6 61/4	9½ 10
10	7:349	7 1	7.015	7	6.702	63	6.411	61	10
II	7 349	$7\frac{1}{2}$	7.139	7 1	6.805	$6\frac{3}{4}$	6.495	$6\frac{1}{3}$	$10_{\bar{2}}$
$\mathbf{II}_{\frac{1}{2}}^{\frac{1}{2}}$	7.810	7 3 4	7.428	$7\frac{1}{2}$	7.074	7	6.744	$6\frac{3}{4}$	1112
12	7.943	8	7.536	$7\frac{1}{2}$	7.161	71	6.814	$6\frac{3}{4}$	12
121	8.241	81/4	7.811	74	7.414	71/2	7.047	7	121
13	8.358	81	7.904	8	7.487	$7\frac{1}{2}$ $7\frac{3}{4}$	7.103	7,	13
13½	8·643 8·745	8 ³ / ₄	8·165 8·244	$\frac{8\frac{1}{4}}{8\frac{1}{4}}$	7·726 7·786	7 ⁴ / ₄	7·322 7·367	71/4	13½
14	9.018	9	8.492	$8\frac{1}{2}$	8.011	8	7.571	$7\frac{1}{2}$	14 143
15	9.108	9	8.559	81/2	8.061	8	7.606	7 1 2	15
151	9.368	91	8.794	83	8.272	81/4	7.796	7 3 4	$15\frac{1}{2}$
16	9.447	$9^{\frac{1}{2}}$	8.851	8.3	8.313	81	7.824	73	16
161	9.695	94	9.074	9	8.211	$8\frac{1}{2}$	8.001	8	161
17 17½	9.763	9 ³ / ₄	9.332 9.122	9 91	8·544 8·731	$8\frac{1}{2}$ $8\frac{3}{4}$	8.022 8.187	81	17 17 ¹ / ₂
18	10.020	IO	9:372	91 91	8.756	83	8.201	81	18
181	10.582	Iol	9.571	94 9½	8.931	9	8.356	81	181
19	10.336	IOI	9.604	$9^{\frac{1}{2}}$	8.950	9	8.365	81	19
192	10.221	$10\frac{1}{2}$	9.792	94	9.112	9	8.209	81/2	$19\frac{1}{2}$
20	10.294	$10\frac{1}{2}$	9.818	94	9.159	91	8.514	81	20
201	10.800	103	9.997	10	9.283	91	8.647	8 ³ / ₄ 8 ³ / ₄	$20\frac{1}{2}$
2I 2I ¹ / ₂	10.836	103	10.182	10	9°292 9°437	91/2	8·649 8·773	884	2I 2I1/2
21 2	11.001	II	10.501	101	9 437	$9\frac{1}{2}$	8.772	83	22
221	11.548	1114	10.360	101	9.578	$9^{\frac{1}{2}}$	8.887	9	$22\frac{1}{2}$
23	11.272	111	10.371	104	9.580	$9^{\frac{1}{2}}$	8.883	9	23
232		II	10.21	101	9.707	93	8.991	9	$23\frac{1}{2}$
24	11.469	$II\frac{1}{2}$	10.259	102	9.707	934	8.985	9	24
241		113	10.671	103	9.826	94	9.084	9	24½ 25
25	11.654	113	10.675	103	9.823	91	9.077	1 9	1 2

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money

Years	Years' F Purchase	7 %	Years' Purchase	3 %	Years' Purchase	9 %	Years' 1	0%	Years
25½	11.814	II 3/4	10.809	$10\frac{3}{4}$	9.934	IO	9.169	$9\frac{1}{4}$	25½
26 26½	11.826 11.979	$11\frac{3}{4}$ 12	10.036	$10\frac{3}{4}$	9.929	IO	9.161	9社	26 26½
20 ₂	11.9/9	12	10.932	II	10.033	10	9°247 9°237	9 ¹ / ₄	202
27½	12.135	$12\frac{1}{4}$	11.024	II	10.124	10	9:317	94 94	$27\frac{1}{2}$
28	12.137	$12\frac{1}{4}$	11.021	11	10.119	10	9.307	$9\frac{1}{4}$	28
28½	12.275	$12\frac{\hat{1}}{4}$	11.163	$II\frac{1}{4}$	10.502	$IO_{\frac{1}{4}}$	9.380	$9\frac{1}{2}$	28½
29	12.278	$12\frac{1}{4}$	11.128	$II\frac{1}{4}$	10.108	101	9.370	$9\frac{1}{2}$	29
29½ 30	12.409	$12\frac{1}{2}$ $12\frac{1}{2}$	11·264 11·258	$II\frac{1}{4}$ $II\frac{1}{4}$	10.283	$10\frac{1}{4}$ $10\frac{1}{4}$	9.438 9.427	$9\frac{1}{2}$ $9\frac{1}{2}$	29½ 30
301	12.534	$12\frac{1}{5}$	11.357	II4 II4	10.353	101	9 427	$9\frac{1}{2}$	30 ¹ / ₂
31	12.232	122	11.320	$II_{\frac{1}{4}}^{4}$	10.343	101	9 490	$9^{\frac{1}{2}}$	31
$31\frac{1}{2}$	12.650	$12\frac{3}{4}$	11.444	$II\frac{1}{2}$	10.417	$10\frac{1}{2}$	9.538	$9\frac{1}{2}$	$31\frac{1}{2}$
32	12.647	$12\frac{3}{4}$	11.435	$II\frac{1}{2}$	10.406	101	9.526	$9^{\frac{1}{2}}$	32
32½	12.759	$12\frac{3}{4}$	11.23	$II\frac{1}{2}$	10.475	101	9.581	$9^{\frac{1}{2}}$	$32\frac{1}{2}$
33	12°754 12°860	$12\frac{3}{4}$ $12\frac{3}{4}$	11.214	$\begin{array}{c c} II\frac{1}{2}\\ II\frac{1}{2} \end{array}$	10.464	10½	9·569 9·620	$9\frac{1}{2}$	33
33½ 34	12.854	$12\frac{3}{4}$	11.587	112	10.229	$10\frac{1}{2}$	9.609	$9\frac{1}{2}$ $9\frac{1}{2}$	33 ¹ / ₂ 34
34 ¹ / ₂	12.955	13	11.665	113	10.248	$10\frac{1}{2}$	9.655	$9\frac{3}{4}$	$34\frac{1}{2}$
35	12.948	13	11.655	$II\frac{3}{4}$	10.267	$10\frac{1}{2}$	9.644	$9\frac{3}{4}$	35
351/2	13.044	13	11.728	$II\frac{3}{4}$	10.623	$10\frac{1}{2}$	9.687	98/4	$35\frac{1}{2}$
36	13.032	13	11.414	$II\frac{3}{4}$	10.612	101/2	9.677	94	36
361	13.117	13	11.786	$11\frac{3}{4}$ $11\frac{3}{4}$	10.664	$10\frac{3}{4}$ $10\frac{3}{4}$	9·716 9·706	$9\frac{3}{4}$ $9\frac{3}{4}$	36½ 37
37 $37\frac{1}{2}$	13.503	$13\frac{1}{4}$	11.840	$II\frac{3}{4}$	10.702	103	9.742	94	$\frac{37}{2}$
38	13.193	131	11.829	113	10.601	103	9.733	93/4	38
381	13.275	131	11.890	12	10.736	103/4	9.766	9 3	$38\frac{1}{2}$
39	13.562	134	11.879	12	10.726	103	9.757	93/4	39
$39\frac{1}{2}$	13.342	134	11.936	12	10.768	$10\frac{3}{4}$	9.788	93/4	39 ½
40	13.332	$13\frac{1}{4}$ $13\frac{1}{2}$	11.925	12	10.757	10 ³ / ₄	9.779 9.808	$9\frac{3}{4}$ $9\frac{3}{4}$	40
40½ 41	13.405	$13\frac{1}{2}$	11.967	12	10 797	104	9.799	94	40½ 41
4112	13.464	$13\frac{1}{2}$	- 12.018	12	10.823	103/4	9.826	$9\frac{3}{4}$	4112
42	13.452	$13\frac{1}{2}$	12.007	12	10.813	$10\frac{3}{4}$	9.817	$9\frac{3}{4}$	42
42½	13.218	13½	12.054	12	10.848	$10\frac{3}{4}$	9.842	93/4	421/2
43	13.207	$13\frac{1}{2}$	12.043	12	10.838	103	9.834	9 3	43
43½ 44	13.558	$13\frac{1}{2}$ $13\frac{1}{2}$	12.088	12	10.861	$10\frac{3}{4}$ $10\frac{3}{4}$	9·857 9·849	9 ⁸ / ₄ 9 ³ / ₄	43½ 44
44 44 ¹ / ₂	13.617	$13\frac{1}{2}$	12.110	12	10.890	104	9.870	94	44 44 ¹ / ₂
45	13.606	$13\frac{1}{2}$	12.108	12	10.881	II	9.863	93/4	45
45\frac{1}{2}	13.662	$13\frac{3}{4}$	12.148	124	10.909	II	9.882	10	45\frac{1}{2}
46	13.650	134	12.137	$12\frac{1}{4}$	10.000	II	9.875	IO	46
46½	13.703	133	12.174	124	10.018	11	9.893	10	461/2
47 47½	13.692	134	12.104	$12\frac{1}{4}$ $12\frac{1}{4}$	10.913	II	9.903	10	47 47 ¹ / ₂
48	13.730	1334	12.189	121	10.934	II	9.897	10	48
48 1	13.778	$13\frac{3}{4}$	15.555	121	10.956	II	9.912	10	481
49	13.767	1334	12.212	121	10.948	TI	9.906	10	49
492	13.812	133	12.243	$12\frac{1}{4}$	10.969	II	9.920	10	492
50	13.801	1334	12.533	121	10.962	II	9.912	10	10

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{3}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years' Purchase	7 %	Years' Purchase	8 %	Years' Purchase	3 %	Years' Purchase 1) %	Years
51	13.832	133	12.253	121	10.974	II	9.923	IO	51
52	13.862	133	12.272	$12\frac{1}{4}$	10.982	II	9.930	10	52
53	13.890	14	12.588	121	10.996	II	9.936	10	53
54	13.916	14	12.304	124	11.002	11	9.942	10	54
55	13.940	14	12.319	124	11.014	II	9.947	10	55
56	13.963	14	12.335	12	11.055	II	9.952	10	56
57	13.984	14	12.344	121	11.029	II	9.956	IO	57
58	14.003	14	12:356	124	11.036	II	9.960	10	58
59	14.022	14	12:367	121	11.042	II	9.964	10 10	59 60
60	14.039	14	12.377	121			9.967		61
61	14.055	14	12:386	121	11.023	II	9.970	10	62
62	14.070	14	12.394	$12\frac{1}{2}$ $12\frac{1}{2}$	11.058	II	9·973 9·975	10	63
63	14.004	14	12 402	$12\frac{1}{2}$	11.002	II	9 9/3	IO	64
65	14.110	14	12.416	121	11.020	II	9.980	10	65
65	14.151	14	12.422	121	11.073	II	9.981	IO	66
67	14 121	141	12.428	121	11.073	II	9.983	IO	67
68	14.142	141	12.433	$12\frac{1}{2}$	11.079	II	9.985	IO	63
60	14.152	141	12.438	$12\frac{1}{2}$	11.085	II	9.986	IO	69
70	14.160	141	12.443	$12\frac{1}{2}$	11.084	11	9.987	IO	70
71	14.160	141	12:447	121	11.087	11	9.988	10	71
72	14.176	141	12.451	121	11.080	11	9.990	IO	72
73	14.183	141	12.455	$12\frac{1}{2}$	11.001	11	9.990	10	73
74	14.190	141	12.458	$12\frac{\tilde{1}}{2}$	11.092	ΙI	9.991	IO	74
75	14.196	141	12.461	$12\frac{1}{2}$	11.094	II	9.992	10	75
76	14.202	141	12.464	121	11.095	ΙI	9.993	10	76
77	14.208	141	12.467	$12\frac{1}{2}$	11.097	11	9.994	10	77 78
78	14.513	141	12.469	121	11.008	11	9.994	10	
79	14.518	141	12.471	$12\frac{1}{2}$	11.099	II	9.995	IO	79
80	14.222	141	12.474	121	11.100	11	9.995	10	80
81	14.226	141	12.475	$12\frac{1}{2}$	11.101	II	9.996	10	81
82	14.230	141	12.477	121	11.102	II	9.996	10	82
83	14.234	141	12.479	$12\frac{1}{2}$	11.103	II	9.996	10	83
84 85	14.237	14 ¹ / ₁	12.481	$12\frac{1}{2}$ $12\frac{1}{2}$	11.103	II	9.997	IO	84 85
	.14.240	141	12.483	121			9.997		86
86	14.243	141	12.485	121	11.104	II	9°997 9°997	10 10	87
88	14.240	141	12.486	$12\frac{1}{2}$	11.102	II	9 997	10	88
89	14.251	141	12.487	121	11.109	II	9.998	10	89
90	14.523	141	12.488	121	11.109	II	9.998	IO	90
91	14.255	141	12.489	121	11.107	II	9.998	IO	91
92	14.257	141	12.489	$12\frac{1}{2}$	11.107	II	9.998	10	92
93	14.259	141	12.490	121	11.102	II	9.999	10	93
94	14.261	141	12.491	$12\frac{1}{2}$	801.11	11	9.999	IO	94
95	14.263	$14\frac{1}{4}$	12.492	$12\frac{1}{2}$	11.108	II	9.999	10	95
96	14.264	141	12.492	$12\frac{1}{2}$	11.108	II	9.999	IO	96
97	14.266	$14\frac{1}{4}$	12.493	$12\frac{1}{2}$	11.100	II	9.999	IO	97
98	14.267	141	12.493	$12\frac{1}{2}$	11.100	II	9.999	IO	98
99	14.268	141	12.494	$12\frac{1}{2}$	11.100	II	9.999	10	99
100	14'269	141	12.494	$12\frac{1}{2}$	11.100	II	9.999	10	100

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

Purchaser may thereby make of his money.									
Years	Years' Purchase	11°/。	Years' Purchase	12°/。	Years' Purchase	13°/。	Years' Purchase	14°/。	Years
$egin{array}{cccccccccccccccccccccccccccccccccccc$	*474 *901 1*349 1*713 2*135	1 I I 1 1 1 2 1 3 1 2 1 4 1 2 1 4 1 1 2 1 4 1 1 1 1 1 1 1	·472 ·893 I·337 I·690 2·106	$ \begin{array}{c} $	·469 ·885 I·324 I·668 2·078	$\frac{\frac{1}{2}}{1}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{3}{4}$ $\frac{2}{4}$	·467 ·877 I·312 I·647 2·050	1 1 1 1 1 1 1 2 2	$1^{\frac{1}{2}}$ $1^{\frac{1}{2}}$ $2^{\frac{1}{2}}$ $2^{\frac{1}{2}}$
3 3 ¹ / ₂ 4 4 ¹ / ₂ 5	2·444 2·841 3·102 3·476 3·696	$2\frac{1}{2}$ $2\frac{3}{4}$ $3\frac{1}{2}$ $3\frac{3}{4}$	2·402 2·791 3·037 3·401 3·605	2 ¹ / ₄ 2 ³ / ₄ 3 3 ¹ / ₂ 3 ¹ / ₂	2·361 2·742 2·974 3·328 3·517	2\frac{1}{4} 2\frac{3}{4} 3\frac{1}{4} 3\frac{1}{2}	2·322 2·695 2·914 3·258 3·433	2\frac{1}{4} 2\frac{3}{4} 3 3\frac{1}{4} 3\frac{1}{2}	3 3 ¹ / ₂ 4 4 ¹ / ₂ 5
$\begin{array}{c c} 5\frac{1}{2} \\ 6 \\ 6\frac{1}{2} \\ 7 \\ 7\frac{1}{2} \end{array}$	4.046 4.231 4.559 4.712 5.019	4 44 44 42 43 5	3·943 4·111 4·426 4·564 4·856	4 4 4 2 4 2 4 3 4 4	3·845 3·998 4·300 4·423 4·701	$3\frac{3}{4}$ $4\frac{1}{4\frac{1}{4}}$ $4\frac{1}{4\frac{2}{4}}$ $4\frac{3}{4}$	3.749 3.889 4.179 4.288 4.554	3 ³ / ₄ 4 4 ¹ / ₄ 4 ¹ / ₂	5½ 6 6½ 7 7½
8 8½ 9 9½ 10	5·146 5·432 5·537 5·804 5·889	51/2 51/2 51/2 51/2 51/4	4·968 5·239 5·328 5·579 5·650	5 54 54 52 53 54	4.799 5.055 5.132 5.367 5.426	4 ³ 5 5 ¹ 5 ¹ 5 ¹ 5 ¹	4.639 4.882 4.946 5.168 5.216	4 ³ 4 5 5 5 ¹ 4 5 ¹ 4	8 8½ 9 9½ 10
$\begin{array}{c c} 10\frac{1}{2} \\ 11 \\ 11\frac{1}{2} \\ 12 \\ 12\frac{1}{2} \end{array}$	6·138 6·207 6·438 6·492 6·707	$ \begin{array}{c c} 6\frac{1}{4} \\ 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{1}{4} \\ 6\frac{3}{4} \end{array} $	5.882 5.938 6.152 6.194 6.392	6 6 6 6 6 6 6 6 6	5.642 5.687 5.885 5.918 6.099	5 ³ / ₄ 5 ³ / ₄ 6 6 6	5·418 5·453 5·636 5·660 5·827	51/200/400/400/400/400/400/400/400/400/400	$ \begin{array}{c} 10\frac{1}{2} \\ 11 \\ 11\frac{1}{2} \\ 12 \\ 12\frac{1}{2} \end{array} $
$\begin{array}{c} 13 \\ 13\frac{1}{2} \\ 14 \\ 14\frac{1}{2} \\ 15 \end{array}$	6.750 6.949 6.982 7.167 7.191	634 7 7 74 74	6·424 6·605 6·628 6·795 6·811	$ \begin{array}{c c} 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \end{array} $	6·122 6·288 6·302 6·454 6·462	$ \begin{array}{c c} 6 \\ 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \end{array} $	5.842 5.993 6.002 6.139 6.142	5 ³ / ₄ 6 6 6 6 ¹ / ₄ 6 ¹ / ₄	13 13½ 14 14½ 15
$ \begin{array}{c c} 15\frac{1}{2} \\ 16 \\ 16\frac{1}{2} \\ 17 \\ 17\frac{1}{2} \end{array} $	7·362 7·379 7·538 7·549 7·695	741212122 7212234 734	6·965 6·974 7·115 7·120 7·249	7 7 7 7 7 7	6.600 6.604 6.730 6.729 6.843	$ \begin{array}{c c} 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \end{array} $	6·266 6·265 6·377 6·373 6·474	61 61 61 61 61 61 61	$\begin{array}{c c} 15\frac{1}{2} \\ 16 \\ 16\frac{1}{2} \\ 17 \\ 17\frac{1}{2} \end{array}$
$\begin{array}{c c} 18 \\ 18\frac{1}{2} \\ 19 \\ 19\frac{1}{2} \\ 20 \end{array}$	7·702 7·837 7·839 7·964 7·963	7 ³ / ₄ 7 ³ / ₄ 7 ³ / ₄ 8	7·250 7·368 7·366 7·475 7·469	74 74 74 74 72 72 72	6.840 6.944 6.938 7.032 7.025	6 ³ / ₄ 7 7 7 7	6·467 6·559 6·550 6·632 6·623	$ \begin{array}{c} 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 6\frac{1}{2} \end{array} $	$ \begin{array}{c c} 18 \\ 18\frac{1}{2} \\ 19 \\ 19\frac{1}{2} \\ 20 \end{array} $
$\begin{array}{c c} 20\frac{1}{2} \\ 21 \\ 21\frac{1}{2} \\ 22 \\ 22\frac{1}{2} \end{array}$	8.079 8.075 8.182 8.176 8.274	8 8 8 8 4 8 4 8	7·569 7·562 7·653 7·645 7·728	7½ 7½ 7½ 7½ 7¾ 3¾ 7¾ 7¾	7·111 7·102 7·179 7·170 7·240	7 7 7 7 7 7 7	6.697 6.687 6.753 6.743 6.803	$ \begin{array}{r} 6\frac{3}{4} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \end{array} $	$\begin{array}{c} 20\frac{1}{2} \\ 21 \\ 21\frac{1}{2} \\ 22\frac{1}{2} \\ 22\frac{1}{2} \end{array}$
$\begin{array}{c} 23 \\ 23\frac{1}{2} \\ 24 \\ 24\frac{1}{2} \\ 25 \end{array}$	8·266 8·357 8·348 8·431 8·422	81 81 81 81 82 82	7·718 7·795 7·784 7·854 7·843	734 734 734 734 734 734	7·230 7·294 7·283 7·341 7·330	7± 7± 7± 7± 7± 7± 7± 7± 7± 7± 7± 7± 7± 7	6.792 6.846 6.835 6.883 6.873	$ \begin{array}{c c} 6\frac{3}{4} \\ 6\frac{3}{4} \\ 6\frac{3}{4} \\ 7 \\ 6\frac{3}{4} \end{array} $	$\begin{array}{ c c c }\hline 23 \\ 23\frac{1}{2} \\ 24 \\ 24\frac{1}{2} \\ 25 \\ \end{array}$

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

	Years'	440/		40°			Veare'	4 4 9 /	
Years	Purchase	, ,	Years' Purchase	12°/ _°		13°/ _°	Years' Purchase	14°/ _°	Years
$\begin{array}{c} 25\frac{1}{2} \\ 26 \\ 26\frac{1}{2} \\ 27 \\ 27\frac{1}{2} \end{array}$	8 498 8·488 8·559 8·548 8·613	812 812 812 82 82 82	7·907 7·896 7·953 7·943 7·995	8 8 8 8	7·382 7·372 7·419 7·409 7·451	7½ 7½ 7½ 7½ 7½ 7½	6·916 6·906 6·945 6·935 6·970	7 7 7 7	$ \begin{array}{c} 25\frac{1}{2} \\ 26 \\ 26\frac{1}{2} \\ 27 \\ 27\frac{1}{2} \end{array} $
$\begin{array}{c c} 28 \\ 28\frac{1}{2} \\ 29 \\ 29\frac{1}{2} \\ 30 \end{array}$	8.602 8.661 8.650 8.705 8.694	819 828 834 834 834 834	7·984 8·032 8·022 8·066 8·055	8 8 8 8	7·441 7·480 7·470 7·505 7·496	712121212121212121212121212121212121212	6.961 6.992 6.983 7.011 7.003	7 7 7 7 7	28 28½ 29 29½ 30
$\begin{array}{c} 30\frac{1}{2} \\ 31 \\ 31\frac{1}{2} \\ 32 \\ 32\frac{1}{2} \end{array}$	8·744 8·733 8·779 8·769 8·811	834 834 834 834 834 834	8.095 8.085 8.121 8.112 8.145	8 8 8 8 8 <u>1</u>	7·527 7·518 7·547 7·538 7·564	7½ 7½ 7½ 7½ 7½ 7½	7.028 7.020 7.042 7.035 7.055	7 7 7 7	$\begin{array}{c} 30\frac{1}{2} \\ 31 \\ 31\frac{1}{2} \\ 32 \\ 32\frac{1}{2} \end{array}$
33 33½ 34 34½ 35	8·801 8·839 8·829 8·865 8·855	834 834 834 834 834 834	8·135 8·165 8·157 8·184 8·176	814 814 814 814 814	7·556 7·579 7·572 7·593 7·586	7½ 7½ 7½ 7½ 7½ 7½	7·048 7·066 7·060 7·076 7·070	7 7 7 7	33 33 ¹ / ₂ 34 34 ¹ / ₂ 35
$\begin{array}{c} 35\frac{1}{2} \\ 36 \\ 36\frac{1}{2} \\ 37 \\ 37\frac{1}{2} \end{array}$	8.888 8.879 8.908 8.900 8.927	9 9 9 9	8·200 8·192 8·215 8·208 8·228	814 814 814 814	7.604 7.598 7.615 7.609 7.624	721212121212121212121212121212121212121	7·084 7·079 7·092 7·087 7·098	7 7 7 7	35½ 36 36½ 37 37½
38 38½ 39 39½ 40	8·919 8·944 8·936 8·959 8·951	9 9 9 9	8·221 8·240 8·233 8·250 8·244	814 814 814 814	7.618 7.632 7.627 7.639 7.634	71234343437434 7343434 7343734	7.094 7.104 7.100 7.109 7.105	7 7 7 7	38 38½ 39 39½ 40
$\begin{array}{c} 40\frac{1}{2} \\ 41 \\ 41\frac{1}{2} \\ 42 \\ 42\frac{1}{2} \end{array}$	8·972 8·965 8·984 8·977 8·995	9 9 9 9	8·259 8·253 8·267 8·262 8·274	814 814 814 814 814	7·645 7·641 7·651 7·647 7·656	734343434343434343434343434343434343434	7·113 7·110 7·117 7·114 7·120	7 7 7 7	$\begin{array}{c} 40\frac{1}{2} \\ 41 \\ 41\frac{1}{2} \\ 42 \\ 42\frac{1}{2} \end{array}$
43 43½ 44 44½ 45	8·989 9·005 8·999 9·013 9·008	9 9 9 9	8·270 8·281 8·276 8·287 8·283	81 81 81 81 81 81 81	7·652 7·660 7·657 7·664 7·661	734 734 734 734 734 743 743	7·117 7·123 7·120 7·126 7·123	7 7 7 7 1 7	43 43½ 44 44½ 45
45½ 46 46½ 47 47½	9·021 9·016 9·028 9·024 9·035	9 9 9 9	8·292 8·288 8·296 8·293 8·300	81 81 81 81 81 81 81	7.667 7.664 7.670 7.658 7.673	734343437434 743434 7434	7·128 7·126 7·130 7·128 7·131	714 714 714 714 714	45½ 46 46½ 47 47½
48 48½ 49 49½ 50	9.030 9.040 9.036 9.046 9 .042	9 9 9 9	8·297 8·304 8·301 8·307 8·305	8 ¹ / ₄ 8 ¹ / ₄ 8 ¹ / ₄ 8 ¹ / ₄	7·671 7·675 7·673 7·677 7·675	7343437434 7343437434 73434 734	7·130 7·133 7·131 7·134 7·133	74 74 74 74 74	48 48½ 49 49½ 50

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from $1\frac{1}{2}$ to 20 per cent. Interest which the Purchaser may thereby make of his money.

Years	Years' Purchase	15°/	Years' Purchase	16°/。	Years' Purchase	18°/。	Years' C Purchase	20°/	Years
$egin{pmatrix} rac{1}{2} \\ 1 \\ 1 \\ rac{1}{2} \\ 2 \\ 2 \\ rac{1}{2} \\ \end{array}$	*465 *870 1*300 1.626 2*023	1234 144 134 2	*463 *862 1·289 1·605 1·996	122 141 122 2	*459 *847 1·266 1·566 1·945	1 1 1 1 1 1 1 2 2 2	.455 .833 1.243 1.528 1.895	124 334 144 152 2	$1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 1 \\ 2 \\ 2 \\ $
3 3 ¹ / ₂ 4 4 ¹ / ₂ 5	2·283 2·648 2·855 3·189 3·352	214 234 234 34 314 314	2·246 2·603 2·798 3·123 3·274	214 213 234 314	2·174 2·516 2·690 2·998 3·127	2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄ 3 3 ¹ / ₄	2·106 2·434 2·589 2·880 2·991	$ \begin{array}{c} 2 \\ 2\frac{1}{2} \\ 2\frac{1}{2} \\ 3 \\ 3 \end{array} $	$egin{array}{c} 3 \\ 3 \frac{1}{2} \\ 4 \\ 4 \frac{1}{2} \\ 5 \\ \end{array}$
$egin{array}{c} 5rac{1}{2} \ 6 \ 6rac{1}{2} \ 7 \ 7rac{1}{2} \ \end{array}$	3.658 3.784 4.063 4.160 4.414	$3\frac{3}{4}$ $3\frac{3}{4}$ $4\frac{1}{4}$ $4\frac{1}{2}$	3·569 3·685 3·952 4·039 4·280	3½ 3¾ 4 4 4 44	3·403 3·498 3·743 3·812 4·030	3121 3231 334 34 4	3·248 3·326 3·552 3·605 3·803	34 34 32 32 32 34	5½ 6 6½ 7 7½
8 8 ¹ / ₂ 9 9 ¹ / ₂ 10	4.487 4.717 4.772 4.980 5.019	4½ 4¾ 4¾ 5 5	4·344 4·561 4·607 4·802 4·833	4 ¹ / ₄ 4 ¹ / ₂ 4 ² / ₄ 4 ³ / ₄ 4 ³ / ₄	4.078 4.272 4.303 4.475 4.494	4 4 ¹ / ₄ 4 ¹ / ₂ 4 ¹ / ₂	3·837 4·011 4·031 4·182 4·192	3 ³ / ₄ 4 4 4 ¹ / ₄ 4 ¹ / ₄	8 8 ¹ / ₂ 9 9 ¹ / ₂ 10
$\begin{array}{c c} 10\frac{1}{2} \\ 11 \\ 11\frac{1}{2} \\ 12 \\ 12\frac{1}{2} \end{array}$	5·207 5·234 5·403 5·421 5·573	5 ¹ / ₄ 5 ¹ / ₂ 5 ¹ / ₂ 5 ¹ / ₂	5.008 5.029 5.186 5.197 5.337	5 5 5 5 5 4 5 4 5	4.646 4.656 4.790 4.793 4.911	4 ³ 4 4 ³ 4 4 ³ 4 4 ³ 4 5	4·324 4·327 4·442 4·439 4·539	4 ¹ / ₄ 4 ¹ / ₂ 4 ¹ / ₂ 4 ¹ / ₂ 4 ¹ / ₂	$\begin{array}{c} 10\frac{1}{2} \\ 11 \\ 11\frac{1}{2} \\ 12 \\ 12\frac{1}{2} \end{array}$
$\begin{array}{c c} 13 \\ 13\frac{1}{2} \\ 14 \\ 14\frac{1}{2} \\ 15 \end{array}$	5·583 5·721 5·724 5·848 5·847	512344343543543543543455434554	5·342 5·468 5·468 5·579 5·575	54 512 52 52 52 52 52 52	4.910 5.013 5.008 5.099 5.092	5 5 5 5	4.533 4.619 4.611 4.685 4.675	4½ 4½ 4½ 4¾ 4¾ 4¾	$ \begin{array}{c} 13 \\ 13\frac{1}{2} \\ 14 \\ 14\frac{1}{2} \\ 15 \end{array} $
$\begin{array}{ c c c }\hline 15\frac{1}{2}\\ 16\\ 16\frac{1}{2}\\ 17\\ 17\frac{1}{2}\\ \end{array}$	5.958 5.954 6.054 6.047 6.136	6 6 6 6 6 ₄	5·675 5·668 5·757 5·749 5·827	5434 5434 5434 5434 5434 5434 5434	5·171 5·162 5·232 5·222 5·283	54 54 54 54 54	4·740 4·730 4·785 4·775 4·822	44 34 3	$\begin{array}{c} 15\frac{1}{2} \\ 16 \\ 16\frac{1}{2} \\ 17 \\ 17\frac{1}{2} \end{array}$
$ \begin{array}{c c} 18 \\ 18\frac{1}{2} \\ 19 \\ 19\frac{1}{2} \\ 20 \end{array} $	6·128 6·208 6·198 6·269 6·259	$ \begin{array}{c c} 6\frac{1}{4} \\ 6\frac{1}{4} \\ 6\frac{1}{4} \\ 6\frac{1}{4} \end{array} $	5.818 5.888 5.877 5.939 5.929	5 ³ / ₄ 6 6 6 6	5·273 5·326 5·316 5·363 5·353	54 54 54 54 54	4·812 4·853 4·844 4·878 4·870	4 ³ / ₄ 4 ³ / ₄ 4 ³ / ₄ 5 4 ³ / ₄	$ \begin{array}{c} 18 \\ 18\frac{1}{2} \\ 19 \\ 19\frac{1}{2} \\ 20 \end{array} $
$\begin{array}{c c} 20\frac{1}{2} \\ 21 \\ 21\frac{1}{2} \\ 22 \\ 22\frac{1}{2} \end{array}$	6·323 6·312 6·369 6·359 6·409	61 61 61 61 61 62	5.984 5.973 6.022 6.011 6.054	6 6 6 6	5.393 5.384 5.419 5.410 5.441	5½ 5½ 5½ 5½ 5½ 5½ 5½	4.900 4.891 4.917 4.909 4.931	5 5 5 5	$\begin{array}{c} 20\frac{1}{2} \\ 21 \\ 21\frac{1}{2} \\ 22 \\ 22\frac{1}{2} \end{array}$
$\begin{array}{c} 23 \\ 23\frac{1}{2} \\ 24 \\ 24\frac{1}{2} \\ 25 \end{array}$	6·399 6·444 6·434 6·474 6·464	$ \begin{array}{c c} 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \end{array} $	6.044 6.082 6.073 6.106 6.097	6 6 6 6	5·432 5·459 5·451 5•474 5·467	5½ 5½ 5½ 5½ 5½	4.925 4.943 4.937 4.953 4.948	5 5 5 5 5	$\begin{array}{c c} 23 \\ 23\frac{1}{2} \\ 24 \\ 24\frac{1}{2} \\ 25 \end{array}$

For explanation see p. (13).

TABLE for the PURCHASING of Leases, Estates, or Annuities, for terms of years certain at Rates from 1½ to 20 per cent. Interest which the Purchaser may thereby make of his money

	B 37 1	Furch				or his			
Years	Years' Purchase	15°/ _°	Years' Purchase				Years' Purchase	20°/。	Years
$\begin{array}{c} 25\frac{1}{2} \\ 26 \\ 26\frac{1}{2} \\ 27 \\ 27\frac{1}{2} \end{array}$	6·500 6·491 6·522 6·514 6·542	$ \begin{array}{c c} 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \end{array} $	6·127 6·118 6·144 6·136 6·159	$ \begin{array}{c c} 6\frac{1}{4} \\ 6 \\ 6\frac{1}{4} \\ 6\frac{1}{4} \\ 6\frac{1}{4} \end{array} $	5·487 5·480 5·498 5·492 5·507	5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	4·961 4·956 4·968 4·964 4·974	5 5 5 5 5	$ \begin{array}{c c} 25\frac{1}{2} \\ 26 \\ 26\frac{1}{2} \\ 27 \\ 27\frac{1}{2} \end{array} $
28 28½ 29 29½ 30	6.534 6.559 6.551 6.573 6.566	$ \begin{array}{c c} 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \\ 6\frac{1}{2} \end{array} $	6·152 6·172 6·166 6·183 6·177	6¼ 6¼ 6¼ 6¼ 6¼	5·502 5·515 5·510 5·521 5·517	5½ 5½ 5½ 5½ 5½ 5½	4·970 4·978 4·975 4·982 4·979	5 5 5 5	28 28½ 29 29½ 30
$\begin{array}{c c} 30\frac{1}{2} \\ 31 \\ 31\frac{1}{2} \\ 32 \\ 32\frac{1}{2} \end{array}$	6·586 6·579 6·597 6·591 6·606	6½ 6½ 6½ 6½ 6½ 6½	6·193 6·187 6·201 6·196 6·208	6¼ 6¼ 6¼ 6¼	5·527 5·523 5·531 5·528 5·535	512 5212 5212 5212 512 512	4·985 4·982 4·988 4·985 4·990	5 5 5 5	$30\frac{1}{2}$ 31 $31\frac{1}{2}$ 32 $32\frac{1}{2}$
33 33½ 34 34½ 35	6.600 6.614 6.609 6.621 6.617	6½ 6½ 6½ 6½ 6½ 6½	6·203 6·214 6·210 6·219 6·215	61 61 61 61 61	5.532 5.538 5.536 5.541 5.539	5½ 5½ 5½ 5½ 5½ 5½	4.988 4.992 4.990 4.993 4.992	5 5 5 5	33 33½ 34 34½ 35
35½ 36 36½ 37 37½	6.627 6.623 6.633 6.629 6.637	634 623 634 634 634	6·224 6·220 6·227 6·224 6·231	61 61 61 61 61 61	5.543 5.541 5.545 5.543 5.547	512121212 5121212 51212 51212	4.994 4.993 4.995 4.994 4.996	5 5 5 5	$35\frac{1}{2}$ 36 $36\frac{1}{2}$ 37 $37\frac{1}{2}$
38 38½ 39 39½ 40	6.634 6.641 6.638 6.645 6.642	634 634 634 634 634	6·228 6·233 6·231 6·236 6·233	61 61 61 61 61 61 61	5.545 5.548 5.547 5.549 5.548	5 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	4·995 4·997 4·996 4·997 4·997	5 5 5 5	38 38½ 39 39½ 40
$\begin{array}{c} 40\frac{1}{2} \\ 41 \\ 41\frac{1}{2} \\ 42 \\ 42\frac{1}{2} \end{array}$	6.648 6.645 6.650 6.648 6.652	634 634 634 634 634 634	6·238 6·236 6·239 6·238 6·241	61 61 61 61 61 61	5.550 5.549 5.551 5.550 5.552	5 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	4·998 4·997 4·998 4·998 4·998	5 5 5 5	40½ 41 41½ 42 42½
43 43½ 44 44½ 45	6.650 6.654 6.652 6.656 6.654	634 634 634 634 634	6·239 6·242 6·241 6·243 6·242	61 61 61 61 61	5·551 5·552 5·552 5·553 5·552	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4·998 4·999 4·999 4·999	5 5 5 5	43 43½ 44 44½ 45
45½ 46 46½ 47 47½	6.657 6.656 6.659 6.657 6.660	634 634 634 634 634	6·244 6·243 6·245 6·244 6·246	61 61 61 61 61 61	5.553 5.553 5.554 5.553 5.554	512 512 512 512 512 52 52	4·999 4·999 4·999 4·999	5 5 5 5 5	45½ 46 46½ 47 47½
48 48½ 49 49½ 50	6.659 6.661 6.660 6.661	634 634 634 634 634	6·245 6·246 6·246 6·247 6·246	64 64 64 64 64	5.554 5.554 5.554 5.554 5.554	5½ 5½ 5½ 5½ 5½ 5½ 5½	4·999 5·000 4·999 5·000 4·999	5 5 5 5	48 48½ 49 49½ 50

The F	e Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years								
After Years	Years' 1	$\frac{1}{2}\%$	Years' Purchase	$\frac{3}{4}\%$	Years' Purchase	2%	Years' 2	14%	After Years
1 2 3 4 5	65.681 64.711 63.754 62.812 61.884	65 ³ / ₄ 64 ³ / ₄ 63 ³ / ₄ 62 ³ / ₄ 62	56·160 55·194 54·245 53·312 52·395	56 \\ 55 \\ 54 \\ 53 \\ 52 \\ 52 \\ 2	49.020 48.058 47.116 46.192 45.287	49 48 47 46 ¹ / ₄ 45 ¹ / ₄	43.466 42.510 41.575 40.660 39.765	43½ 42½ 41½ 40¾ 39¾	1 2 3 4 5
6 7 8 9	60.969 60.068 59.181 58.306	61 60 59 ¹ / ₄ 58 ¹ / ₄ 57 ¹ / ₂	51.494 50.608 49.738 48.882 48.042	51½ 50½ 49¾ 49 48	44·399 43·528 42·675 41·838 41·017	44½ 43½ 42¾ 41¾ 41	38·890 38·034 37·197 36·379 35·578	39 38 37 ¹ / ₄ 36 ¹ / ₂ 35 ¹ / ₂	6 7 8 9
11 12 13 14 15	56·596 55·759 54·935 54·123 53·323	56½ 55¾ 55 54 53¼	47.215 46.403 45.605 44.821 44.050	47 ¹ / ₄ 46 ¹ / ₂ 45 ¹ / ₂ 44 ³ / ₄ 44	40·213 39·425 38·652 37·894 37·151	40 ¹ / ₄ 39 ¹ / ₂ 38 ³ / ₄ 38 37 ¹ / ₄	34.795 34.030 33.281 32.549 31.832	$ \begin{array}{r} 34\frac{3}{4} \\ 34 \\ 33\frac{1}{4} \\ 32\frac{1}{2} \\ 31\frac{3}{4} \end{array} $	11 12 13 14 15
16 17 18 19 20	52.535 51.759 50.994 50.241 49.498	52½ 51¾ 51 50¼ 49½	43.292 42.548 41.816 41.097 40.390	43 ¹ / ₄ 42 ¹ / ₂ 41 ² / ₄ 41 40 ¹ / ₂	36·422 35·708 35·008 34·322 33·649	36½ 35¾ 35 34¼ 33¾	31·132 30·447 29·777 29·122 28·481	$ 31\frac{1}{4} 30\frac{1}{2} 29\frac{3}{4} 29 28\frac{1}{2} $	16 17 18 19 20
21 22 23 24 25	48·767 48·046 47·336 46·636 45·947	48 ³ / ₄ 48 47 ¹ / ₄ 46 ¹ / ₂ 46	39.695 39.013 38.342 37.682 37.034	39 ³ / ₄ 39 38 ¹ / ₄ 37 ³ / ₄ 37	32·989 32·342 31·708 31·086 30·477	$ \begin{array}{c} 33 \\ 32\frac{1}{4} \\ 31\frac{3}{4} \\ 31 \\ 30\frac{1}{2} \end{array} $	27·854 27·241 26·642 26·055 25·482	$ \begin{array}{r} 27\frac{3}{4} \\ 27\frac{1}{4} \\ 26\frac{3}{4} \\ 26 \\ 25\frac{1}{2} \end{array} $	21 22 23 24 25
26 27 28 29 30	45·268 44·599 43·940 43·291 42·651	$ 45\frac{1}{4} 44\frac{1}{2} 44 43\frac{1}{4} 42\frac{3}{4} $	36·397 35·771 35·156 34·551 33·957	36½ 35¼ 35¼ 34½ 34½	29.879 29.293 28.719 28.156 27.604	$ \begin{array}{c} 30 \\ 29\frac{1}{4} \\ 28\frac{3}{4} \\ 28\frac{1}{4} \\ 27\frac{1}{2} \end{array} $	24·921 24·373 23·837 23·312 22·799	25 24 ¹ / ₄ 23 ³ / ₄ 23 ³ / ₄ 22 ³ / ₄	26 27 28 29 30
31 32 33 34 35	42.021 41.400 40.788 40.185 39.591	$ \begin{array}{c c} 42 \\ 41\frac{1}{2} \\ 40\frac{3}{4} \\ 40\frac{1}{4} \\ 39\frac{1}{2} \end{array} $	33·373 32·799 32·235 31·680 31·136	33 ¹ / ₄ 32 ¹ / ₄ 32 ¹ / ₄ 31 ¹ / ₄	27.062 26.532 26.011 25.501 25.001	$ \begin{array}{c c} 27 \\ 26\frac{1}{2} \\ 26 \\ 25\frac{1}{2} \\ 25 \end{array} $	22·297 21·807 21·327 20·858 20·399	22 ¹ / ₄ 21 ³ / ₄ 21 ¹ / ₄ 20 ³ / ₄ 20 ¹ / ₂	3 ¹ 3 ² 33 34 35
36 37 38 39 40	39.006 38.430 37.862 37.302 36.751	$ \begin{array}{r} 39 \\ 38\frac{1}{2} \\ 37\frac{3}{4} \\ 36\frac{3}{4} \end{array} $	30.600 30.074 29.557 29.048 28.549	$ \begin{array}{c} 30\frac{1}{2} \\ 30 \\ 29\frac{1}{2} \\ 29 \\ 28\frac{1}{2} \end{array} $	24.511 24.031 23.559 23.097 22.645	$ \begin{array}{c c} 24\frac{1}{2} \\ 24 \\ 23\frac{1}{2} \\ 23 \\ 22\frac{3}{4} \end{array} $	19.950 19.511 19.081 18.662 18.251	$ \begin{array}{c c} 19\frac{1}{2} \\ 19 \\ 18\frac{3}{4} \\ 18\frac{1}{4} \end{array} $	36 37 38 39 40
41 42 43 44 45	36·208 35·673 35·145 34·626 34·114	36¼ 35¾ 35¼ 34½ 34	28.058 27.575 27.101 26.635 26.177	$ \begin{array}{c c} 28 \\ 27\frac{1}{2} \\ 27 \\ 26\frac{3}{4} \\ 26\frac{1}{4} \end{array} $	22:201 21:765 21:338 20:920 20:510	$ \begin{array}{c} 22\frac{1}{4} \\ 2I\frac{3}{4} \\ 2I\frac{1}{4} \\ 2I \\ 2I \\ 20\frac{1}{2} \end{array} $	17·849 17·457 17·072 16·697 16·329	$ \begin{array}{c c} & 17\frac{3}{4} \\ & 17\frac{1}{2} \\ & 17 \\ & 16\frac{3}{4} \\ & 16\frac{1}{4} \end{array} $	41 42 43 44 45
46 47 48 49 50	33.610 33.113 32.624 32.142 31.667	$ \begin{array}{c} 33\frac{1}{2} \\ 33 \\ 32\frac{1}{2} \\ 32\frac{1}{4} \\ 31\frac{3}{4} \end{array} $	25.726- 25.284 24.849 24.422 24.002	$ \begin{array}{r} 25\frac{3}{4} \\ 25\frac{1}{4} \\ 24\frac{3}{4} \\ 24\frac{1}{2} \\ 24 \end{array} $	20·108 19·713 19·327 18·948 18·576	$ \begin{array}{c c} 20 \\ 19\frac{3}{4} \\ 19\frac{1}{4} \\ 19 \\ 18\frac{1}{2} \end{array} $	15.970 15.619 15.275 14.939 14.610	16 15½ 15¼ 15 14½	46 47 48 49 50

For explanation see p. (14).

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' Purchase	L½ %	Years' 1	3/4 %	Years' Purchase	2 %	Years' Purchase 2	14%	After Years
51 52 53 54 55	31·199 30·738 30·284 29·836 29·395	$ \begin{array}{c} 31\frac{1}{4} \\ 30\frac{3}{4} \\ 30\frac{1}{4} \\ 29\frac{3}{4} \\ 29\frac{1}{2} \end{array} $	23.589 23.183 22.784 22.393 22.007	$ \begin{array}{c c} 23\frac{1}{2} \\ 23\frac{1}{4} \\ 22\frac{3}{4} \\ 22\frac{1}{2} \\ 22 \end{array} $	18·212 17·855 17·505 17·162 16·825	$ \begin{array}{c c} 18\frac{1}{4} \\ 17\frac{3}{4} \\ 17\frac{1}{2} \\ 17\frac{1}{4} \\ 16\frac{3}{4} \end{array} $	14·289 13·974 13·667 13·366 13·072	14 ¹ / ₄ 14 13 ³ / ₄ 13 ¹ / ₄ 13	51 52 53 54 55
56 57 58 59 60	28.961 28.533 28.111 27.696 27.286	$ \begin{array}{c c} 29 \\ 28\frac{1}{2} \\ 28 \\ 27\frac{3}{4} \\ 27\frac{1}{4} \end{array} $	21.629 21.257 20.891 20.532 20.179	$ \begin{array}{c} 2I\frac{3}{4} \\ 2I\frac{1}{4} \\ 2I \\ 2I \\ 20\frac{1}{2} \\ 20\frac{1}{4} \end{array} $	16·495 16·172 15·855 15·544 15·239	16½ 16¼ 15¾ 15½ 15½	12.784 12.503 12.228 11.959 11.695	$ \begin{array}{c} 12\frac{3}{4} \\ 12\frac{1}{2} \\ 12\frac{1}{4} \\ 12 \\ 11\frac{3}{4} \end{array} $	56 57 58 59 60
61 62 63 64 65	26·883 26·486 26·094 25·709 25·329	$ \begin{array}{c} 27 \\ 26\frac{1}{2} \\ 26 \\ 25\frac{3}{4} \\ 25\frac{1}{4} \end{array} $	19.832 19.491 19.156 18.826 18.502	19\frac{3}{1} 19\frac{1}{2} 19 18\frac{3}{4} 18\frac{1}{2}	14.940 14.647 14.360 14.079 13.803	$ \begin{array}{c c} 15 \\ 14\frac{3}{4} \\ 14\frac{1}{4} \\ 14 \\ 13\frac{3}{4} \end{array} $	11.438 11.186 10.940 10.700 10.464	$ \begin{array}{c} 11\frac{1}{2} \\ 11\frac{1}{4} \\ 11 \\ 10\frac{3}{4} \\ 10\frac{1}{2} \end{array} $	61 62 63 64 65
66 67 68 69 70	24.955 24.586 24.222 23.864 23.512	$ \begin{array}{c} 25 \\ 24\frac{1}{2} \\ 24\frac{1}{4} \\ 23\frac{3}{4} \\ 23\frac{1}{2} \end{array} $	18·184 17·871 17·564 17·262 16·965	18 ¹ / ₁ 17 ³ / ₄ 17 ¹ / ₂ 17 ¹ / ₄ 17	13.532 13.267 13.006 12.751 12.501	$ \begin{array}{c} 13\frac{1}{2} \\ 13\frac{1}{4} \\ 13 \\ 12\frac{3}{4} \\ 12\frac{1}{2} \end{array} $	10·234 10·009 9·788 9·573 9·362	10 10 9 ³ / ₄ 9 ¹ / ₂ 9 ¹ / ₄	66 67 68 69 70
71 72 73 74 75	23·164 22·822 22·485 22·152 21·825	$ \begin{array}{c} 23\frac{1}{4} \\ 22\frac{3}{4} \\ 22\frac{1}{2} \\ 22\frac{1}{4} \\ 21\frac{3}{4} \end{array} $	16.673 16.386 16.105 15.828	$ \begin{array}{c} 16\frac{3}{4} \\ 16\frac{1}{2} \\ 16 \\ 15\frac{3}{4} \\ 15\frac{1}{2} \end{array} $	12·256 12·016 11·780 11·549 11·323	$ \begin{array}{c} 12\frac{1}{4} \\ 12 \\ 11\frac{3}{4} \\ 11\frac{1}{2} \\ 11\frac{1}{4} \end{array} $	9·156 8·955 8·758 8·565 8·377	$9\frac{1}{4}$ 9 $8\frac{3}{4}$ $8\frac{1}{2}$	71 72 73 74 75
76 77 78 79 80	21·503 21·185 20·872 20·563 20·259	$ \begin{array}{c c} 2I\frac{1}{2} \\ 2I\frac{1}{4} \\ 2O\frac{3}{4} \\ 2O\frac{1}{4} \\ 2O\frac{1}{4} \end{array} $	15.288 15.025 14.766 14.513 14.263	$ \begin{array}{c} 15\frac{1}{4} \\ 15 \\ 14\frac{3}{4} \\ 14\frac{1}{2} \\ 14\frac{1}{4} \end{array} $	11·101 10·883 10·670 10·461 10·255	$ \begin{array}{c} 11 \\ 11 \\ 10\frac{3}{4} \\ 10\frac{1}{2} \\ 10\frac{1}{4} \end{array} $	8·192 8·012 7·836 7·663 7·495	8 ¹ / ₄ 7 ³ / ₄ 7 ¹ / ₂ 7 ¹ / ₂	76 77 78 79 80
85 90 95 100	18·806 17·457 16·204 15·042	$ \begin{array}{c c} 18\frac{3}{4} \\ 17\frac{1}{2} \\ 16\frac{1}{4} \\ 15 \end{array} $	13.048 11.061 10.081	13 12 11 10	9·289 8·413 7·620 6·902	9 ¹ / ₄ 8 ¹ / ₂ 7 ⁸ / ₄ 7	6·706 6·000 5·368 4·803	$ \begin{array}{c} 6\frac{3}{4} \\ 6 \\ 5\frac{1}{4} \\ 4\frac{3}{4} \end{array} $	95 100

Examples.—The perpetuity of an annuity of £1 per annum after 65 years is worth in present money: at $1\frac{3}{4}$ per cent. £18·502, or $18\frac{1}{2}$ years' purchase; at $2\frac{1}{4}$ per cent. £10·464, or $10\frac{1}{2}$ years' purchase.

The l	The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years										
After Years	Years' 2	$\frac{1}{2}\%$	Years' 2	$\frac{3}{4}\%$	Years' Purchase	3 %	Years' Purchase 3	$\frac{1}{2}\%$	A fter Years		
Years 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 15 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Purchase 23 39 024 38 073 37 144 36 238 35 354 34 492 33 651 32 830 32 029 31 248 30 486 29 742 29 017 28 309 27 619 26 945 26 288 25 647 25 021 24 411 23 815 23 235 22 668 22 1155 21 576 21 049 20 536 20 035 19 546 19 070 18 605	$\begin{array}{c} 1 \\ 2 \\ 0 \\ 0 \\ 39 \\ 38 \\ 37 \\ 36 \\ 4^{\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}} \\ 38 \\ 37 \\ 36 \\ 4^{\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}} \\ 38 \\ 37 \\ 37 \\ 37 \\ 37 \\ 37 \\ 37 \\ 37$	Years' Purchase 2 35:390 34:443 33:521 32:624 31:751 30:901 30:074 29:269 28:486 27:724 26:982 26:259 22:5557 24:873 24:207 23:559 22:929 22:315 21:718 21:136 20:571 20:020 19:484 18:963 18:455 17:961 17:481 17:013 16:557 16:114 15:683	$\begin{array}{c} 3\\ 4\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\$			Years' Purchase 3 27.605 26.672 25.770 24.898 24.056 23.243 22.457 20.964 20.255 19.570 18.908 18.269 17.651 17.054 16.477 15.920 15.382 14.862 14.359 13.873 13.404 12.951 12.513 12.090 11.681 11.286 10.904 10.536 10.179 9.835 9.503	$\begin{array}{c} \frac{1}{2} \sqrt{0} \\ 27 \frac{1}{2} \frac{1}{$			
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	18:151 17:708 17:276 16:855 16:444 16:043 15:651 15:270 14:897 14:534 14:179 13:834 13:496 13:167 12:533 12:227 11:929 11:638	1741484 1612 1614841611 1614841611 1614841611 1614841611 1614841611 1614841611 1614841611 16148416184161	15.263 14.855 14.457 14.457 14.457 13.694 13.327 12.971 12.623 12.286 11.957 11.637 11.325 11.022 10.727 10.440 10.161 9.889 9.624 9.366	$\begin{array}{c} 15\frac{1}{4}434\frac{1}{4}\\ 144\frac{1}{2}\\ 14\\ 13\frac{3}{4}\frac{1}{4}\\ 13\\ 12\frac{1}{2}\frac{1}{4}\\ 12\\ 12\frac{3}{4}\frac{1}{4}\\ 11\frac{3}{4}\\ 11$	12:568 12:201 11:846 11:501 11:166 10:841 10:525 10:219 9:921 9:632 9:351 9:079 8:815 8:558 8:309 8:667 7:832 7:604	12-14-84 13-14-84-14 11-14-84-14 10-14-8 11-15-14-8 884-15-14-8 88	9:181 8:871 8:571 8:281 8:001 7:730 7:469 7:216 6:972 6:773 6:509 6:289 6:076 5:871 5:672 5:480 5:295 5:116	9888888777777666655555555555555555555555	33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50		

For explanation see p. (14).

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Yars' 2	1/2 %	Years' 2	3/4 %	Years' Purchase	3 %	Years' C	$3\frac{1}{2}\%$	After Years
51 52 53 54 55	11.354 11.077 10.807 10.543 10.286	$ \begin{array}{c} 11\frac{1}{4} \\ 11 \\ 10\frac{3}{4} \\ 10\frac{1}{2} \\ 10\frac{1}{4} \end{array} $	9·116 8·872 8·634 8·403 8·178	9 8 8 8 4 8 1 2 8 4	7·382 7·167 6·958 6·756 6·559	$ 7\frac{1}{2} 7\frac{1}{4} 7 6\frac{3}{4} 6\frac{1}{2} $	4.943 4.776 4.614 4.458 4.307	5 4 ³ / ₄ 4 ¹ / ₂ 4 ¹ / ₄	51 52 53 54 55
56 57 58 59 60	10.035 9.790 9.552 9.319 9.091	10 9 ⁸ / ₄ 9 ¹ / ₂ 9 ¹ / ₄	7.959 7.746 7.539 7.337 7.141	8 7 ³ / ₄ 7 ¹ / ₂ 7 ¹ / ₄ 7 ¹ / ₄	6·368 6·182 6·002 5·828 5·658	$6\frac{1}{4}$ $6\frac{1}{4}$ 6 $5\frac{3}{4}$ $5\frac{3}{4}$	4·162 4·021 3·885 3·754 3·627	4 4 4 3 3 4 3 4 3 4	56 57 58 59 60
61 62 63 64 65	8·870 8·653 8·442 8·236 8·035	84 84 81 81 81 81 81 8	6·950 6·764 6·583 6·407 6·235	7 634 64 64	5.493 5.333 5.178 5.027 4.880	5½ 5½ 5½ 5	3.504 3.386 3.271 3.160 3.054	3 ¹ / ₂ 3 ¹ / ₄ 3 ¹ / ₄ 3	61 62 63 64 65
66 67 68 69 70	7·839 7·648 7·462 7·280 7·102	78437 7121 714 7	6.068 5.906 5.748 5.594 5.444	6 5 ⁸ / ₄ 5 ¹ / ₂ 5 ¹ / ₂	4.738 4.600 4.466 4.336 4.210	44 41 41 41 41 41 41	2·950 2·851 2·754 2·661 2·571	3 2 ³ / ₄ 2 ³ / ₄ 2 ³ / ₄ 2 ³ / ₂	66 67 68 69 70
71 72 73 74 75	6·929 6·760 6·595 6·434 6·277	7 6 ³ / ₄ 6 ¹ / ₂ 6 ¹ / ₄	5·299 5·157 5·019 4·884 4·754	51 51 5 5 43 43	4.087 3.968 3.853 3.740 3.632	4 3 ³ / ₄ 3 ³ / ₄ 3 ³ / ₄	2.484 2.400 2.319 2.241 2.165	2½ 2½ 2½ 2½ 2½ 2½	71 72 73 74 75
76 77 78 79 80	6·124 5·975 5·829 5·687 5·548	6 5 3 5 3 5 4 5 2	4.626 4.503 4.382 4.265 4.151	4 ³ 4 ¹ 4 ¹ 4 ¹ 4 ¹ 4 ¹ 4 ¹	3.526 3.423 3.233 3.227 3.133	31 31 31 31 31 31 31 31	2:092 2:021 1:952 1:886 1:823	2 2 2 2 1 3/4	76 77 78 79 80
95 100	4.904 4.334 3.831 3.386	5 4 ¹ / ₄ 3 ³ / ₄ 3 ¹ / ₂	3.624 3.164 2.763 2.413	3½ 3¼ 2¾ 2½ 2½	2.702 2.331 2.011 1.734	2\frac{3}{4} 2\frac{1}{4} 2 1\frac{3}{4}	1.232 1.088	I 1/2 I 1/4 I I	85 90 95 100

The I	Present Val	ue of 1			OF A PEI		JITY after	any g	iven
After Years	Years' Purchase 4	<u> </u>	Years' Purchase 4	$\frac{1}{2}\%$	Years' Purchase	5 %	Years' Purchase 6	%	After Years
		24 23 22 ¹ / ₄ -1/ ₂ 20 ² / ₂ 19 ³ / ₄ 19 18 ⁴ / ₂ 17 16 ¹ / ₄ -1/ ₂ 15 ¹ / ₂ 14 13 ⁴ / ₄ 12 ⁴ / ₄ 12 ⁴ / ₄	Purchase 4 21·265 20·350 19·473 18·635 17·832 17·064 16·330 15·626 14·953 14·310 13·693 13·104 12·539 11·999 11·483 10·988 10·515 10·062	$\begin{array}{c} \frac{1}{2} \\ 0 \\ 2 \\ 1 \\ \frac{1}{4} \\ 20 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ $		19 18 ¹ / ₄ 16 ¹ / ₆ 15 ¹ / ₄ 16 ¹ / ₆ 15 ¹ / ₄ 15 ¹ / ₄ 15 ¹ / ₁ 15 ¹ / ₄ 16 ¹ / ₆ 10 10 9 ¹ / ₂ 1 1 16 ¹ / ₂ 10 9 ¹ / ₄ 10 ¹ / ₆ 10 9 ¹ / ₄ 10 ¹ / ₆ 10 8 ¹ / ₄ 10 ¹ / ₆ 10 8 ¹ / ₆ 10 10 10 10 10 10 10 10 10 10 10 10 10		15.84.814 14.12.814 14.12.814 11.10.814-14.814 11.10.814-14.814-14.814 7.10.14.814 7.10.14.814 7.10.14.814 7.10.14.814 7.10.14.814 7.10.14.814 7.10.14.814 7.10.14.814	
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	12·341 11·866 11·410 10·971 10·549 10·143 9·753 9·378 9·017 8·670 8·337 8·016 7·708 7·412 7·126 6·852 6·852 6·589 6·335 6·092 5·857 5·632	12 4 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9·629 9·629 9·214 8·818 8·438 8·074 7·727 7·394 7·076 6·771 6·479 6·200 5·933 5·678 5·199 4·975 4·761 4·556 4·360 4·172	998888888442 84424 84424 84424 84424 4444 4444 4444 4444 4444 4444 4444 4444	7·915 7·538 7·179 6·837 6·511 6·201 5·906 5·625 5·357 5·102 4·859 4·628 4·407 4·197 3·997 3·807 3·626 3·453 3·289 3·132	0 8 7 1 1 1 4 2 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1	5.599 5.197 4.903 4.625 4.363 4.116 3.883 3.456 3.261 3.902 2.738 2.583 2.436 2.299 2.168 2.046 1.930	555555444334343244 33333333324242444 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38
38 39 40 41 42 43 44 45 46 47 48 49	5 '032 5 '416 5 '207 5 '007 4 '814 4 '629 4 '451 4 '280 4 '115 3 '957 3 '805 3 '659 3 '518	54-121-14 5-121	3 '993 3 821 3 '656 3 '499 3 '348 3 '204 3 '066 2 '934 2 '808 2 '687 2 '571 2 '460	44 4 34 84 122 14 13 3 3 2 84 84 122 12 12 2 2 2 2 2	2 · 983 2 · 984 2 · 577 2 · 454 2 · 337 2 · 226 2 · 120 2 · 019 1 · 923 1 · 831 1 · 744	3 3 4 3 4 2 1 2 1 2 2 2 2 1 3 4 3 4 4 1 4 1 2 2 1 3 1 4 3 4 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.718 1.620 1.529 1.442 1.360 1.283 1.211 1.142 1.078 1.017 959	14 1844 1212 1212 1124 114 114 114	39 40 41 42 43 44 45 46 47 48 49 50

For explanation see p. (14).

The Present Value of the REVERSION OF A PERPETUITY after any given Term not exceeding 100 Years

After Years	Years' 4	: %	Years' 4	1/2 %	Years' Purchase	5 %	Years' Purchase	3 %	After Years
51 52 53 54 55	3·383 3·253 3·128 3·007 2·892	3½ 3½ 3½ 34 3	2°354 2°253 2°156 2°063 1°974	2 ¹ / ₄ 2 ¹ / ₄ 2 ¹ / ₄ 2	1.661 1.582 1.507 1.435 1.367	1 3 4 1 2 1 2 1 2 1 4 1 4 1 4 1 4 1 4 1 4 1	·854 ·806 ·760 ·717 ·677	হ্মবিক্ষাব্যক্তাব্যক্তাব্য	51 52 53 54 55
55 57 58 59 60	2·781 2·674 2·571 2·472 2·377	$2\frac{3}{4}$ $2\frac{3}{4}$ $2\frac{1}{2}$ $2\frac{1}{2}$ $2\frac{1}{2}$	1.889 1.808 1.730 1.655 1.584	2 I 3/4 I 3/4 I 1/2	1·302 1·240 1·181 1·125 1·071	I \frac{1}{4} I \frac{1}{4} I \frac{1}{4} I \frac{1}{4} I	·639 ·603 ·568 ·536 ·506	841/814/814/814/81	56 57 58 59 60
61 62 63 64 65	2·285 2·197 2·113 2·031 1·953	$2\frac{1}{4}$ $2\frac{1}{4}$ 2 2	1.516 1.451 1.388 1.328 1.271	$ \begin{array}{c} \mathbf{I}_{\frac{1}{2}} \\ \mathbf{I}_{\frac{1}{2}} \\ \mathbf{I}_{\frac{1}{4}} \\ \mathbf{I}_{\frac{1}{4}} \end{array} $	1.020 .971 .925 .881 .839	I I I I	'477 '450 '424 '400 '378	1 21 21 21 21 21 2	61 62 63 64 65
66 67 68 69 70	1·878 1·806 1·736 1·670 1·605	2 I $\frac{3}{4}$ I $\frac{3}{4}$ I $\frac{1}{2}$	1·217 1·164 1·114 1·066 1·020		.799 .761 .725 .690	হে ব হে বংহে বংহে বংহ	*356 *336 *317 *299 *282	1 07- 07- 07- 44	66 67 68 69 70
71 72 73 74 75	1.544 1.484 1.427 1.372 1.320	I 1/2 I 1/2 I 1/2 I 1/4 I 1/4	•976 •934 •894 •855 •819	I I I 34534	•626 •596 •568 •541 •515	গ্রাধনাগ্রনাগ্রনাগ্র	·266 ·255 ·237 ·223 ·211	그 작가 작가 작가 되었	71 72 73 74 75
76 77 78 79 80	1·269 1·220 1·173 1·128 1·085	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•7 ⁸ 3 •750 •717 •686 •657	छ सक्त्रस्क सक्त्रस्क	•491 •467 •445 •424 •404	101010101010	•199 •188 •177 •167 •158	다. 다. 다. 다	76 77 78 79 80
85 90 95 100	·891 ·733 ·602 ·495	I 34 11 22 12 12 22	°527 °423 °339 °272	10010010014	·316 ·248 ·194 ·152	1931444	•118 •088 •066 •049	$\begin{array}{c} \frac{1}{8} \\ \frac{1}{11} \\ \frac{1}{15} \\ \frac{1}{20} \end{array}$	85 90 95 100

The I	Present Val	lue of	the REVEL Term not	RSION	OF A PI	ERPETU Years	JITY after	any g	iven
After Years	Years' Purchase	7 %	Years' Purchase	3 %	Years' Purchase	9 %	Years' Purchase	10%	After Years
After Years 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	Years' Purchase 7 13:351 12:477 11:661 10:898 10:185 9:519 8:896 8:314 7:770 7:262 6:787 6:343 5:928 5:540 5:178 4:839 4:522 4:226 3:950 3:691 3:450 3:224 3:013 2:816 2:632 2:460 2:299 2:148 2:008 1:876 1:754 1:639 1:532	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Term not Years' Purchase { 11.574 10.717 9.923 9.188 8.507 7.877 7.294 6.753 6.253 5.790 5.361 4.964 4.596 4.256 3.940 3.378 3.128 2.896 2.483 2.299 2.129 1.971 1.825 1.690 1.565 1.449 1.342 1.150 1.065 .986	$\begin{array}{c} \text{exceed} \\ \textbf{3} \\ \text{0.5} \\ \textbf{1000} \\ \textbf{1000} \\ \textbf{1000} \\ \textbf{100} \\ \textbf$	Ring 100 Years' Purchase 10-194 9-352 8-580 7-872 7-222 6-626 6-078 5-577 5-116 4-694 4-306 3-951 3-625 3-325 3-051 2-799 2-568 2-356 2-161 1-983 1-819 1-669 1-531 1-405 1-289 1-182 1-085 1-085 1-091 3-838 -769 -705 -647	Years	Years' Purchase 9 9:091 8:264 7:513 6:830 6:210 5:645 5:132 4:665 4:241 3:855 3:505 3:186 2:897 2:633 2:394 2:176 1:978 1:799 1:635 1:486 1:351 1:229 1:117 1:015 920 -839 -763 -693 -630 -573 -521 -474 -431		After Years 1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 33
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	1'431 1'338 1'250 1'168 1'092 1'021 '954 -891 '833 '778 '728 -680 -635 '594 '555 '519 '485	I	.913 .845 .783 .725 .671 .621 .575 .533 .493 .457 .423 .392 .363 .311 .288 .267	대 이 내 이 (내이 나이	'594 '545 '500 '458 '421 '386 '354 '325 '298 '273 '251 '230 '211 '194 '178 '163 '150	(31-1(31-1(31-1(31-1(31-1(31-1(31-1(31-	'391 '356 '323 '294 '267 '243 '221 '201 '183 '166 '151 '137 '125 '113 '103 '094 '085	(07-(07-(07-(07-(07-(07-(07-(07-(07-(07-	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

For explanation see p. (14).

-	The Present	Value of the REVERSION OF A PERPETUITY after any given	ven
-		Term not exceeding 100 Years	

After Years	Years' Purchase	7 %	Years' Purchase	3 %	Years' (9 %	Years' 1() %	After Years
51 52 53 54 55	*453 *423 *396 *370 *346	<u>-</u> [위시인자]위시[위시]	*247 *229 *212 *196 *182	1 44 41 54 54 5	*137 *126 *116 *106 *097	1 1 1 8 1 9 1 9 1	*078 *071 *064 *059 *053	$\begin{array}{ c c }\hline 1\\\hline 13\\\hline 14\\\hline 14\\\hline 16\\\hline 1\\\hline 17\\\hline 1\\\hline 19\\\hline \end{array}$	51 52 53 54 55
56 57 58 59 60	*323 *302 *282 *264 *246	13-13-14-14-14	•168 •156 •144 •134 •124	1616171718	•089 •082 •075 •069 •063	$\begin{array}{c c} \frac{1}{11} \\ \frac{1}{12} \\ \frac{1}{13} \\ \frac{1}{14} \\ \frac{1}{16} \end{array}$	*049 *044 *040 *037 *033	$\begin{array}{c c} \frac{1}{20} \\ \frac{1}{23} \\ \frac{1}{25} \\ \frac{1}{27} \\ \frac{1}{30} \end{array}$	56 57 58 59 60
61 62 63 64 65	°230 °21 5 °201 °188 °176	1415151616	°114 °106 °098 °091 °084	$ \begin{array}{c} \frac{1}{9} \\ \frac{1}{9} \\ \frac{1}{10} \\ \frac{1}{11} \\ \frac{1}{12} \end{array} $	*058 *053 *049 *045 *041	$\begin{array}{c} \frac{1}{17} \\ \frac{1}{19} \\ \frac{1}{20} \\ \frac{1}{22} \\ \frac{1}{24} \end{array}$	*030 *027 *025 *022 *020	$ \begin{array}{c} \frac{1}{33} \\ \frac{1}{37} \\ \frac{1}{40} \\ \frac{1}{45} \\ \frac{1}{50} \end{array} $	61 62 63 64 65
66 67 68 69 70	·164 ·154 ·143 ·134 ·125	1616171718	*078 *072 *067 *062 *057	1 13 14 15 16 16 18	·038 ·035 ·032 ·029 ·027	$\begin{array}{c c} \hline $	*019 *017 *015 *014 *013	1 53 1 59 1 67 1 71	66 67 68 69 70
71 72 73 74 75	·117 ·109 ·102 ·096 ·089	1 1 1 10 1 10 1 11	*053 *049 *045 *042 *039	$\begin{array}{c} \frac{1}{19} \\ \frac{1}{20} \\ \frac{1}{22} \\ \frac{1}{54} \\ \frac{1}{26} \end{array}$	*024 *022 *021 *019 *017	$ \begin{array}{r} 1\\ 42\\ 1\\ 45\\ 1\\ 48\\ 1\\ 53\\ 1\\ 59 \end{array} $	*012 *010 *010 *009 *008	$ \begin{array}{c c} \frac{1}{83} \\ \hline 100 \\ 100 \\ \hline 111 \\ \hline 125 \end{array} $	71 72 73 74 75
76 77 78 79 80	.084 .078 .073 .068	$\begin{array}{c c} \frac{1}{12} \\ \frac{1}{13} \\ \frac{1}{14} \\ \frac{1}{15} \\ \frac{1}{16} \end{array}$.036 .033 .031 .029 .026	$ \begin{array}{c} \frac{1}{28} \\ \frac{1}{30} \\ \frac{1}{32} \\ \frac{1}{34} \\ \frac{1}{38} \end{array} $	*016 *015 *013 *012 *011	$ \begin{array}{c c} \hline $	*007 *006 *006 *005	$\begin{array}{c c} \frac{1}{143} \\ \frac{1}{167} \\ \hline \frac{1}{167} \\ \hline \frac{1}{200} \\ \hline \frac{1}{200} \\ \end{array}$	76 77 78 79 80
95 100	*045 *032 *023 *016	$ \begin{array}{c} \frac{1}{22} \\ \frac{1}{31} \\ \frac{1}{43} \\ \frac{1}{62} \end{array} $	*018 *012 *008 *006	$ \begin{array}{c} \frac{1}{566} \\ \frac{1}{83} \\ \frac{1}{125} \\ \frac{1}{167} \end{array} $	*007 *005 *003 *002	$ \begin{array}{c} \frac{1}{14} \\ \frac{1}{200} \\ \frac{1}{333} \\ \frac{1}{500} \end{array} $	*003 *002 *001	$\begin{array}{c} \frac{1}{333} \\ \frac{1}{500} \\ \frac{1}{1000} \\ \frac{1}{1000} \end{array}$	85 90 95 100

Years	ONE 1	POUND	ONE POUND	PER ANNUM	W
rears _	Amount	Present Value	Amount	Present Value	Years
I	1,01000	99010	1.00000	0.99010	1
2	1.02010	•98030	2.01000	1.97040	2
3	1.03030	97059	3.03010	2.94099	3
4	1.04060	•96098	4.06040	3.90197	4
5	1.02101	*95147	2.10101	4.85343	5
6	1.06152	94205	6.15202	5.79548	6
7	1.07214	93272	7.21354	6.72819	7 8
7 8	1.08586	92348	8.28567	7.65168	
9	1.09369	91434	9.36853	8.56602	9
10	1.10465	90529	10.46221	9.47130	10
II	1.11567	*89632	11.56683	10.36763	II
12	1.12683	.88745	12.68250	11.25508	12
13	1.13809	*87866	13.80933	12.13374	13
14	1.14942	*86996	14.94742	13.00370	14
15	1.16092	'86135	16.09690	13.86505	15
16	1.17258	'85282	17.25786	14.71787	16
17	1.18430	.84438	18.43044	15.56225	17
18	1.19612	83602	19.61475	16.39827	18
19	1.50811	82774	20.81089	17.22601	19
20	1.52019	'81954	22.01900	18.04555	20
21	1.23239	.81143	23.23919	18.85698	21
22	I '24472	*80340	24.47159	19.66038	22
23	1.25716	79544	25.71630	20.45582	23
24	1.26973	78757	26.97346	21.24339	24
25	1.28243	77977	28.24320	22.02316	25
26	1.29526	77205	29.52563	22.79520	26
27	1.30821	76440	30.82089	23.55961	27
28	1.32129	75684	32.12910	24.31644	28
29	1·33450 1·34785	74934	33·45039 34·78489	25.06579 25.80771	29
30		*74192			30
31	1.36133	73458	36.13274	26.54229	31
32	1.37494	72730	37.49407	27.26959	32
33	1 · 38869 1 · 40258	72010	38·86901 40·25770	27·98969 28·70267	33
34 35	1.41660	71297 70591	41.66028	29.40858	34 35
1					
36	1.43077	69892	43.07688	30.10750	36
37 38	1.44508 1.45953	68515	44.50765	30·79951 31·48466	37 38
39	1.47412	67837	45 952/2	32.16303	39
40	1.48886	67165	48.88637	32.83469	40
41	1.50375	*66500	50.37524	33.49969	41
42	1.21879	65842	51.87899	34.12811	42
43	1.53398	65190	53.39778	34.81001	43
44	1.24932	*64545	54.93176	35.45545	44
45	1.26481	63906	56.48107	36.09451	45
46	1.58046	.63273	58.04588	36.72724	46
47	1.59626	62646	59.62634	37.35370	
48	1.61223	.62026	61.22261		47 48
49	1.62835	61412	62.83483	37·97396 38·58808	49
50	1.64463	•60804	64.46318	39.19612	50

For explanation see pp. (8-14). (106)

77	ONE	POUND	ONE POUND	PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	Tours
51	1.66108	*60202	66·10781	39·79814	51
52	1.67769	*59606	67·76889	40·39419	52
53	1.69447	*59016	69·44658	40·98435	53
54	1.71141	*58431	71·14105	41·56866	54
55	1.72852	*57853	72·85246	42·14719	55
56	1.74581	·57280	74·58098	42·71999	56
57	1.76327	·56713	76·32679	43·28712	57
58	1.78090	·56151	78·09006	43·84863	58
59	1.79871	·55595	79·87096	44·40459	59
60	1.81670	·55045	81·66967	44·95504	60
61	1·83486	·54500	83·48637	45·50004	61
62	1·85321	·53960	85·32123	46·03964	62
63	1·87174	·53426	87·17444	46·57390	63
64	1·89046	·52897	89·04619	47·10287	64
65	1·90937	·52373	90·93665	47·62661	65
66	1·92846	·51855	92·84601	48·14516	66
67	1·94774	·51341	94·77447	48·65857	67
68	1·96722	·50833	96·72222	49·16690	68
69	1·98689	·50330	98·68944	49·67020	69
70	2·00676	·49831	100·67634	50·16851	70
71	2·02683	*49338	102.68310	50.66190	71
72	2·04710	*48850	104.70993	51.15039	72
73	2·06757	*48366	106.75703	51.63405	73
74	2·08825	*47887	108.82460	52.11292	74
75	2·10913	*47413	110.91285	52.58705	75
76	2·13022	'46944	113.02197	53.05649	76
77	2·15152	'46479	115.15219	53.52127	77
78	2·17304	'46019	117.30372	53.98146	78
79	2·19477	'45563	119.47675	54.43709	79
80	2·21672	'45112	121.67152	54.88821	80
81	2·23888	'44665	123.88824	55°33486	81
82	2·26127	'44223	126.12712	55°777°9	82
83	2·28388	'43785	128.38839	56°21494	83
84	2·30672	'43352	130.67227	56°64845	84
85	2·32979	'42922	132.97900	57°07768	85
86	2·35309	'42497	135·30879	57·50265	86
87	2·37662	'42077	137·66187	57·92342	87
88	2·40038	'41660	140·03849	58·34002	88
89	2·42439	'41248	142·43888	58·75249	89
90	2·44863	'40839	144·86327	59·16088	90
91	2·47312	*40435	147·31190	59·56523	91
92	2·49785	*40034	149·78502	59·96557	92
93	2·52283	*39638	152·28287	60·36195	93
94	2·54806	*39246	154·80570	60·75441	94
95	2·57354	*38857	157·35375	61·14298	95
96 97 98 99 100	2·59927 2·62527 2·65152 2·67803 2·70481	*38472 *38091 *37714 *37341 *36971	159 92729 162 52656 165 15183 167 80335 170 48138	61°52770 61°90862 62°28576 62°65917 63°02888	96 97 98 99

Years	ONE P	OUND	ONE POUND	PER ANNUM	Years	
	Amount	Present Value	Amount	Present Value	20022	
1	1.01250	•98765	1.00000	0.98765	1	
2	1.02516	•97546	2.01250	1.96312	2	
3	1.03797	•96342	3.03766	2.92653	3	
4	1.05095	•95152	4.07563	3.87806	4	
5	1.06408	•93978	5.12657	4.81783	5	
6 7 8 9	1.07738 1.09085 1.10449 1.11829 1.13227	92817 91672 90540 89422 88318	6·19065 7·26804 8·35889 9·46337 10·58167	5.74601 6.66273 7.56812 8.46234 9.34553	6 7 8 9 10	
11	1·14642	·87228	11.71394	10·21780	11	
12	1·16075	·86151	12.86036	11·07931	12	
13	1·17526	·85087	14.02112	11·93018	13	
14	1·18995	·84037	15.19638	12·77055	14	
15	1·20483	·82999	16.38633	13·60055	15	
16	1·21989	·81975	17·59116	14'42029	16	
17	1·23514	·80963	18·81105	15'22992	17	
18	1·25058	·79963	20·04619	16'02955	18	
19	1·26621	·78976	21·29677	16'81931	19	
20	1·28204	·78001	22·56298	17'59932	20	
21	1·29806	.77038	23.84502	18·36969	21	
22	1·31429	.76087	25.14308	19·13056	22	
23	1·33072	.75147	26.45737	19·88204	23	
24	1·34735	.74220	27.78808	20·62423	24	
25	1·36419	.73303	29.13544	21·35727	25	
26	1·38125	·72398	30·49963	22.08125	26	
27	1·39851	·71505	31·88087	22.79630	27	
28	1·41599	·70622	33·27938	23.50252	28	
29	1·43369	·69750	34·69538	24.20002	29	
30	1·45161	·68889	36·12907	24.88891	30	
31	1·46976	·68038	37.58068	25·56929	31	
32	1·48813	·67198	39.05044	26·24127	32	
33	1·50673	·66369	40.53857	26·90496	33	
34	1·52557	·65549	42.04530	27·56046	34	
35	1·54464	·64740	43.57087	28·20786	35	
36	1·56394	·63941	45°11551	28·84727	36	
37	1·58349	·63152	46°67945	29·47878	37	
38	1·60329	·62372	48°26294	30·10250	38	
39	1·62333	·61602	49°88623	30·71852	39	
40	1·64362	·60841	51°48956	31·32693	40	
41	1.66416	•60090	53·13318	31·92784	41	
42	1.68497	•59348	54·79734	32·52132	42	
43	1.70603	•58616	56·48231	33·10748	43	
44	1.72735	•57892	58·18834	33·68640	44	
45	1.74895	•57177	59·91569	34·25817	45	
46	1.77081	•56471	61·66464	34·82288	46	
47	1.79294	•55774	63·43545	35·38062	47	
48	1.81535	•55086	65·22839	35·93148	48	
49	1.83805	•54406	67·04374	36·47554	49	
50	1.86102	•53734	68·88179	37·01288	50	

For explanation see pp. (8-14) (108)

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
1 cars	Amount	Present Value	Amount	Present Value	Tears
51	1.88429	·53071	70·74281	37·54358	51
52	1.90784	·52415	72·62710	38·06773	52
53	1.93169	·51768	74·53494	38·58542	53
54	1.95583	·51129	76·46662	39·09671	54
55	1.98028	·50498	78·42246	39·60169	55
56	2.00503	*49874	80·40274	40·10043	56
57	2.03010	*49259	82·40777	40·59302	57
58	2.05547	*48651	84·43787	41·07952	58
59	2.08117	*48050	86·49334	41·56002	59
60	2.10718	*47457	88·57451	42·03459	60
61	2·13352	·46871	90.68169	42·50330	61
62	2·16019	46292	92.81521	42·96622	62
63	2·18719	·45721	94.97540	43·42343	63
64	2·21453	·45156	97.16259	43·87499	64
65	2·24221	·44599	99.37713	44·32098	65
66	2·27024	·44048	101.61934	44.76146	66
67	2·29862	·43504	103.88958	45.19651	67
68	2·32735	·42967	106.18820	45.62618	68
69	2·35644	·42437	108.51555	46.05055	69
70	2·38590	·41913	110.87200	46.46968	70
71	2.41572	'41395	113·25790	46.88363	71
72	2.44592	'40884	115·67362	47.29247	72
73	2.47649	'40380	118·11954	47.69627	73
74	2.50745	'39881	120·59604	48.09508	74
75	2.53879	'39389	123·10349	48.48897	75
76	2.57053	*38903	125·64228	48.87800	76
77	2.60266	*38422	128·21281	49.26222	77
78	2.63519	*37948	130·81547	49.64170	78
79	2.66813	*37479	133·45066	50.01649	79
80	2.70149	*37017	136·11880	50.38666	80
81	2·73525	36560	138·82028	50.75225	81
82	2·76944	36108	141·55554	51.11334	82
83	2·80406	35663	144·32498	51.46996	83
84	2·83911	35222	147·12904	51.82219	84
85	2·87460	34787	149·96815	52.17006	85
86	2.91053	*34358	152·84276	52·51364	86
87	2.94692	*33934	155·75329	52·85298	87
88	2.98375	*33515	158·70021	53·18813	88
89	3.02105	*33101	161·68396	53·51914	89
90	3.05881	*32692	164·70501	53·84606	90
91	3.09705	32289	167·76382	54·16895	91
92	3.13576	31890	170·86087	54·48785	92
93	3.17496	31496	173·99663	54·80282	93
94	3.21464	31108	177·17159	55·11389	94
95	3.25483	30724	180·38623	55·42113	95
96 97 98 99 100	3·29551 3·33671 3·37842 3·42065 3·46340	'30344 '29970 '29600 '29234 '28873	183.64106 186.93658 190.27328 193.65170 197.07234	55.72457 56.02427 56.32026 56.61261 56.90134	96 97 98 99

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
	Amount	Present Value	Amount	Present Value	Loais
I	1.01200	.98522	I .00000	0.98522	I
2	1.03023	97066	2.01200	1.95588	2
3	1.04568	95632	3.04523	2.01220	3
4	1.06136	94218	4.09090	3.85438	4
5	1.07728	92826	5.15227	4.78265	5
6	1.09344	.91454	6.22955	5.69719	6
7 8	1.10984	.90103	7:32299	6.59821	7 8
	1.12649	.88771	8.43284	7.48593	
9	1.14339	*87459	9.55933	8.36052	9
10	1:16054	.86167	10.70272	9.22219	10
II	1.17795	•84893	11.86326	10.07112	II
12	1.19562	.83639	13.04121	10.90751	12
13	1.51352	.82403	14.23683	11.73153	13
14	1.23176	.81182	15.45038	12.54338	14
15	1.25023	.79985	16.68214	13.34323	15
16	1 • 26899	.78803	17.93237	14.13126	16
17	1.28802	•77639	19.20136	14.90765	17
18	1.30734	.76491	20.48938	15.67256	18
19	1.32695	•75361	21.79672	16.42617	19
20	1.34686	.74247	23.12367	17.16864	20
21	1.36706	.73150	24.47052	17.90014	21
22	1.38756	•72069	25.83758	18.62083	22
23	1.40838	*71004	27.22515	19.33086	23
24	1.42950	•69954	28.63352	20.03041	24
25	1.45095	.68921	30.06302	20.71961	25
26	1.47271	.67902	31.21397	21.39863	26
27	1.49480	•66899	32.98668	22.06762	27
28	1.51722	.65910	34.48148	22.72672	28
29	1.53998	·64936	35.99870	23.37608	29
30	1.56308	•63976	37.53868	24.01584	30
31	1.58653	•63031	39.10176	24.64615	3 r
32	1.61032	·62099	40.68829	25.26714	32
33	1.63448	.61182	42.29862	25.87896	33
34	1.65900	.60277	43.93309	26.48173	34
35	1.68388	.59387	45.59209	27.07560	35
36	1.70914	.58509	47.27597	27.66068	36
37	1.73478	°57644	48.98511	28.23713	37
38	1·76080	.56792	50.71989	28.80505	38
39	1.78721	*55953	52.48068	29.36458	39
40	1.81402	.55126	54.26789	29.91585	40
41	1.84123	*54312	56.08191	30.45896	41
42	1.86885	•53509	57.92314	30.99402	42
43	1.89688	•52718	59.79199	31.22123	43
44	1.92533	*51939	61.68887	32.0406 2	44
45	1.95421	•51171	63.61420	32.55234	45
46	1.98353	.50415	65.56841	33.05649	46
47	2.01328	*49670	67.55194	33.25319	47
48	2.04348	·48936	69.56522	34.04255	48
49	2.07413	'48213	71.60870	34.52468	49
50	2'10524	47500	73.68283	34.99969	50

For explanation see pp. (8-14).

Years	ONE 1	OUND	ONE POUND	PER ANNUM	Years
10075	Amount	Present Value	Amount	Present Value	1000
51	2·13682	°46798	75.78807	35.46767	51
52	2·16887	°46107	77.92489	35.92874	52
53	2·20141	°45426	80.09376	36.38300	53
54	2·23443	°44754	82.29517	36.83054	54
55	2·26794	°44093	84.52962	37.27147	55
56	2·30196	'43441	86·79754	37·70588	56
57	2·33649	'42799	89·09951	38·13387	57
58	2·37154	'42167	91·43600	38·55554	58
59	2·40711	'41544	93·80754	38·97097	59
60	2·44322	'40930	96·21465	39·38027	60
61	2·47987	*40325	98·65787	39.78352	61
62	2·51707	*39729	101·13774	40.18080	62
63	2·55482	*39142	103·65481	40.57222	63
64	2·59314	*38563	106·20963	40.95785	64
65	2·63204	*37993	108·80277	41.33779	65
66	2.67152	*37432	111.43481	41 71211	66
67	2.71160	*36879	114.10634	42 08089	67
68	2.75227	*36334	116.81793	42 44423	68
69	2.79355	*35797	119.57020	42 80220	69
70	2.83546	*35268	122.36375	43 15487	70
71	2·87799	*34746	125·19921	43.50234	71
72	2·92116	*34233	128·07720	43.84467	72
73	2·96498	*33727	130·99836	44.18194	73
74	3·00945	*33229	133·96333	44.51422	74
75	3·05459	*32738	136·97278	44.84160	75
76	3'10041	*32254	140·02737	45.16414	76
77	3'14692	*31777	143·12778	45.48191	77
78	3'19412	*31308	146·27470	45.79499	78
79	3'24203	*30845	149·46882	46.10343	79
80	3'29066	*30389	152·71085	46.40732	80
81	3·34002	*29940	156·00152	46·70672	81
82	3·39012	*29497	159·34154	47·00170	82
83	3·44097	*29062	162·73166	47·29231	83
84	3·49259	*28632	166·17264	47·57863	84
85	3·54498	*28209	169·66523	47·86072	85
86	3.59815	*27792	173·21020	48.13864	86
87	3.65213	*27381	176·80836	48.41246	87
88	3.70691	*26977	180·46048	48.68222	88
89	3.76251	*26578	184·16739	48.94800	89
90	3.81895	*26185	187·92990	49.20985	90
91	3.876 23	·25798	191.74885	49.46784	91
92	3.93438	·25417	195.62568	49.72201	92
93	3.99339	·25041	199.55946	49.97242	93
94	4.05329	·24671	203.55285	50.21913	94
95	4.11409	·24307	207.60614	50.46220	95
96 97 98 99 100	4.17580 4.23844 4.30202 4.36655 4.43205	*23947 *23594 *23245 *22901 *22563	211·72023 215·89604 220·13448 224·43650 228·80304	50·70168 50·93761 51·17006 51·39907 51·62470	96 97 98 99

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
iears	Amount	Present Value	Amount	Present Value	Louis
1	1.01750	·98280	1 ·00000	0.98280	1
2	1.03521	·96590	2·01750	1.94870	2
3	1.05342	·94929	3·05281	2.89798	3
4	1.07186	·93296	4·10623	3.83094	4
5	1.09062	·91691	5·17809	4.74786	5
6 7 8 9	1·10970 1·12912 1·14888 1·16899 1·18944	.88564 .87041 .85544 .84073	6·26871 7·37841 8·50753 9·65641 10·82540	5.64900 6.53464 7.40505 8.26049 9.10122	6 7 8 9
11	1·21026	·82627	12·01484	9 ⁹ 2749	11
12	1·23144	·81206	13·22510	10 ⁹ 73955	12
13	1·25299	·79809	14·45654	11 ⁹ 53764	13
14	1·27492	·78436	15·70953	12 ⁹ 32201	14
15	1·29723	·77087	16·98445	13 ⁹ 09288	15
16	1·31993	75762	18·28168	13·85050	16
17	1·34303	74459	19·60161	14·59508	17
18	1·36653	73178	20·94463	15·32686	18
19	1·39045	71919	22·31117	16·04606	19
20	1·41478	70682	23·70161	16·75288	20
21	1.43954	·69467	25·11639	17:44755	21
22	1.46473	·68272	26·55593	18:13027	22
23	1.49036	·67098	28·02065	18:80125	23
24	1.51644	·65944	29·51102	19:46069	24
25	1.54298	·64810	31·02746	20:10878	25
26	1·56998	·63695	32·57044	20·74573	26
27	1·59746	·62599	34·14042	21·37173	27
28	1·62541	·61523	35·73788	21·98695	28
29	1·65386	·60465	37·36329	22·59160	29
30	1·68280	·59425	39·01715	23·18585	30
31	1.71225	·58403	40.69995	23·76988	31
32	1.74221	·57398	42.41220	24·34386	32
33	1.77270	·56411	44.15441	24·90797	33
34	1.80372	·55441	45.92712	25·46238	34
35	1.83529	·54487	47.73084	26·00725	35
36	1.86741	*53550	49·56613	26·54275	36
37	1.90009	*52629	51·43354	27·06904	37
38	1.93334	*51724	53·33362	27·58628	38
39	1.96717	*50834	55·26696	28·09463	39
40	2.00160	*49960	57·23413	28·59423	40
41	2.03663	*49101	59·23573	29·08524	41
42	2.07227	*48256	61·27236	29·56780	42
43	2.10853	*47426	63·34462	30·04207	43
44	2.14543	*46611	65·45315	30·50817	44
45	2.18298	*45809	67·59858	30·96626	45
46	2·22118	*45021	69·78156	31·41647	46
47	2·26005	*44247	72·00274	31·85894	47
48	2·29960	*43486	74·26278	32·29380	48
49	2·33984	*42738	76·56238	32·72118	49
50	2·38079	*42003	78·90222	33·14121	50

For explanation see pp. (8-14)

Years	ONE	POUND	ONE POUND	PER ANNUM	
lears	Amount	Present Value	Amount	Present Value	Years
51	2·42245	·41280	81·28301	33°55401	51
52	2·46485	·40570	83·70547	33°95972	52
53	2·50798	·39873	86·17031	34°35845	53
54	2·55187	·39187	88·67829	34°75032	54
55	2·59653	·38513	91·23016	35°13545	55
56	2.64197	·37851	93·82669	35.51395	56
57	2.68820	·37200	96·46866	35.88595	57
58	2.73524	·36560	99·15686	36.25155	58
59	2.78311	·35931	101·89210	36.61086	59
60	2.83182	·35313	104·67522	36.96399	60
61	2.88137	34706	107·50703	37.31104	61
62	2.93180	34109	110·38841	37.65213	62
63	2.98310	33522	113·32020	37.98735	63
64	3.03531	32946	116·30331	38.31681	64
65	3.08843	32379	119·33861	38.64060	65
66	3·14247	*31822	122°42704	38·95882	66
67	3·19747	*31275	125°56951	39·27157	67
68	3·25342	*30737	128°76698	39·57893	68
69	3·31036	*30208	132°02040	39·88102	69
70	3·36829	*29689	135°33076	40·17790	70
71	3·42723	*29178	138·69905	40·46968	71
72	3·48721	*28676	142·12628	40·75645	72
73	3·54824	*28183	145·61349	41·03828	73
74	3·61033	*27698	149·16173	41·31526	74
75	3·67351	*27222	152·77206	41·58748	75
76	3.73780	°26754	156·44557	41·85502	76
77	3.80321	°26294	160·18336	42·11795	77
78	3.86977	°25841	163·98657	42·37636	78
79	3.93749	°25397	167·85634	42·63033	79
80	4.00639	°24960	171·79382	42·87994	80
81	4.07650	*24531	175.80022	43°12524	81
82	4.14784	*24109	179.87672	43°36633	82
83	4.22043	*23694	184.02456	43°60328	83
84	4.29429	*23287	188.24499	43°83614	84
85	4.36944	*22886	192.53928	44°06501	85
86	4°44590	*22493	196·90872	44·28993	86
87	4°52371	*22106	201·35462	44·51099	87
88	4°60287	*21726	205·87833	44·72824	88
89	4°68342	*21352	210·48120	44·94176	89
90	4°76538	*20985	215·16462	45·15161	90
91	4.84877	*20624	219 93000	45°35785	91
92	4.93363	*20269	224 77877	45°56054	92
93	5.01997	*19920	229 71240	45°75974	93
94	5.10782	*19578	234 73237	45°95552	94
95	5.19720	*19241	239 84018	46°14793	95
96 97 98 99 100	5·28815 5·38070 5·47486 5·57067 5·66816	18910 18585 18265 17951	245 03739 250 32554 255 70624 261 18110 266 75177	46·33704 46·52288 46·70554 46·88505 47·06147	96 97 98 99

Years	ONE 1	POUND	ONE POUND	PER ANNUM	Years
-	Amount	Present Value	Amount	Present Value	
1 2	1 .02000 1 .04040	·98039 ·96117	I '00000 2 '02000	·98039 1·94156	1 2
3 4 5	1.08243 1.10408	·94232 ·92385 ·90573	3.06040 4.15161 5.50404	2·88388 3·80773 4·71 3 46	3 4 5
6 7 8 9	1·12616 1·14869 1·17166 1·19509 1·21899	·88797 ·87056 ·85349 ·83676 ·82035	6·30812 7·43428 8·58297 9·75463 10·94972	5.60143 6.47199 7.32548 8.16224 8.98258	6 7 8 9
11	1·24337	·80426	12·16872	9·78685	11
12	1·26824	·78849	13·41209	10·57534	12
13	1·29361	·77303	14·68033	11·34837	13
14	1·31948	·75788	15·97394	12·10625	14
15	1·34587	·74301	17·29342	12·84926	15
16	1·37279	·72845	18.63928	13.57771	16
17	1·40024	·71416	20.01207	14.29187	17
18	1·42825	·70016	21.41231	14.99203	18
19	1·45681	·68643	22.84056	15.67846	19
20	1·48595	·67297	24.29737	16.35143	20
2I	1·51567	·65978	25.78332	17 ·01121	2I
22	1·54598	·64684	27.29898	17 ·65805	22
23	1·57690	·63416	28.84496	18 ·29220	23
24	1·60844	·62172	30.42186	18 ·91393	24
25	1·64061	·60953	32.03030	19 ·52346	25
25	1.67342	·59758	33.67090	20·12104	26
27	1.70689	·58586	35.34432	20·70690	27
28	1.74102	·57437	37.05121	21·28127	28
29	1.77584	·56311	38.79223	21·84438	29
30	1.81136	·55207	40.56808	22·39646	30
31	1.84759	·54125	42.37944	22°93770	31
32	1.88454	·53063	44.22703	23°46833	32
33	1.92223	·52023	46.11157	23°98856	33
34	1.96068	·51003	48.03380	24°49859	34
35	1.99989	·50003	49.99447	24°99862	35
36	2·03989	·49022	51·99436	25.48884	36
37	2·08068	·48061	54·03425	25.96945	37
38	2·12230	·47119	56·11494	26.44064	38
39	2·16474	·46195	58·23723	26.90259	39
40	2·20804	·45289	60·40198	27.35548	40
41	2·25220	*44401	62·61002	27·79949	41
42	2·29724	*43530	64·86222	28·23479	42
43	2·34319	*42677	67·15947	28·66156	43
44	2·39005	*41840	69·50265	29·07996	44
45	2·43785	*41020	71·89271	29·49016	45
46	2·48661	°40215	74·33056	29·89231	46
47	2·53634	°39427	76·81717	30·28658	47
48	2·58707	°38654	79·35352	30·67312	48
49	2·63881	°37896	81·94059	31·05208	49
50	2·69159	°37153	84·57940	31·42361	50

For explanation see pp. (8-14).

Years _	ONE	POUND	ONE POUND	PER ANNUM	NUM Years	
	Amount	Present Value	Amount	Present Value	1 cars	
51	2·74542	°36424	87·27098	31·78785	51	
52	2·80033	°35710	90·01640	32·14495	52	
53	2·85633	°35010	92·81673	32·49505	53	
54	2·91346	°34323	95·67307	32·83828	54	
55	2·97173	°33650	98·58653	33·17479	55	
56	3.03117	'32991	101·55826	33·50469	56	
57	3.09179	'32344	104·58943	33·82813	57	
58	3.15362	'31710	107·68121	34·14523	58	
59	3.21670	'31088	110·83484	34·45610	59	
60	3.28103	'30478	114·05154	34·76089	60	
61	3·34665	·29881	117·33257	35.05969	61	
62	3·41358	·29295	120·67922	35.35264	62	
63	3·48186	·28720	124·09280	35.63984	63	
64	3·55149	·28157	127·57466	35.92141	64	
65	3·62252	·27605	131·12615	36.19746	65	
66	3.69497	·27064	134·74868	36.46810	66	
67	3.76887	·26533	138·44365	36.73343	67	
68	3.84425	·26013	142·21252	36.99356	68	
69	3.92114	·25503	146·05677	37.24859	69	
70	3.99956	·25003	149·97791	37.49862	70	
71	4.07955	*24513	153.97747	37·74374	71	
72	4.16114	*24032	158.05702	37·98406	72	
73	4.24436	*23561	162.21816	38·21967	73	
74	4.32925	*23099	166.46252	38·45066	74	
75	4.41584	*22646	170.79177	38·67711	75	
76 77 78 79 80	4.50415 4.59424 4.68612 4.77984 4.87544	·22202 ·21766 ·21340 ·20921 ·20511	175·20761 179·71176 184·30599 188·99211	38·89913 39·11679 39·33019 39·53940 39·74451	76 77 78 79 80	
81	4.97295	·20109	198·64739	39.94560	81	
82	5.07241	·19715	203·62034	40.14275	82	
83	5.17385	·19328	208·69275	40.33603	83	
84	5.27733	·18949	213·86660	40.52551	84	
85	5.38288	·18577	219·14394	40.71129	85	
86	5·49°54	·18213	224·52681	40·89342	86	
87	5·60°35	·17856	230·01735	41·07198	87	
88	5·71235	·17506	235·61770	41·24704	88	
89	5·8266°	·17163	241·33005	41·41867	89	
90	5·94313	·16826	247·15665	41·58693	90	
91	6·06200	·16496	253.09979	41.75189	91	
92	6·18324	·16173	259.16178	41.91362	92	
93	6·30690	·15856	265.34502	42.07217	93	
94	6·43304	·15545	271.65192	42.22762	94	
95	6·56170	·15240	278.08496	42.38002	95	
96 97 98 99	6.69293 6.82679 6.96333 7.10259 7.24465	•14941 •14648 •14361 •14079 •13803	284.64666 291.33959 298.16638 305.12971 312.23230	42·52943 42·67591 42·81952 42·96032 43·09835	96 97 98 99	

See also Tables on pp. (82-97).

Years	ONE 1	OUND CRUDOS	ONE POUND	PER ANNUM	Years
1 ears	Amount	Present Value	Amount	Present Value	lears
1	1.02250	·97800	1.00000	0.97800	1
2	1.04551	·95647	2.02250	1.93447	2
3	1.06903	·93543	3.06801	2.86990	3
4	1.09308	·91484	4.13704	3.78474	4
5	1.11768	·89471	5.23012	4.67945	5
6 7 8 9	1·14283 1·16854 1·19483 1·22171 1·24920	·87502 ·85577 ·83694 ·81852 ·80051	6·34780 7·49062 8·65916 9·85399 11·07571	5.55448 6.41025 7.24718 8.06571 8.86622	6 7 8 9
11	1·27731	·78290	12·32491	9·64911	11
12	1·30605	·76567	13·60222	10·41478	12
13	1·33544	·74882	14·90827	11·16360	13
14	1·36548	·73234	16·24371	11·89594	14
15	1·39621	·71623	17·60919	12·61217	15
16	1·42762	·70047	19 00540	13·31263	16
17	1·45974	·68505	20 43302	13·99768	17
18	1·49259	·66998	21 89276	14·66766	18
19	1·52617	·65523	23 38535	15·32290	19
20	1·56051	·64082	24 91152	15·96371	20
2I 22 23 24 25	1.59562 1.63152 1.66823 1.70577	·62672 ·61292 ·59944 ·58625 ·57335	26·47203 28·06765 29·69917 31·36740 33·07317	16·59043 17·20335 17·80279 18·38904 18·96238	21 22 23 24 25
26	1.78339	·56073	34.81732	19·52311	26
27	1.82352	·54839	36.60071	20·07150	27
28	1.86454	·53632	38.42422	20·60783	28
29	1.90650	·52452	40.28877	21·13235	29
30	1.94939	·51298	42.19526	21·64533	30
31	1.99325	•50169	44 14466	22·14702	31
32	2.03810	•49065	46 13791	22·63767	32
33	2.08396	•47986	48 17602	23·11753	33
34	2.13085	•46930	50 25998	23·58683	34
35	2.17879	•45897	52 39083	24·04580	35
36	2·22782	·44887	54·56962	24·49467	36
37	2·27794	·43899	56·79744	24·93366	37
38	2·32920	·42933	59·07539	25·36299	38
39	2·38160	·41989	61·40457	25·78288	39
40	2·43519	·41065	63·78618	26·19352	40
41	2·48998	·40161	66·22137	26·59513	41
42	2·54601	·39277	68·71135	26·98790	42
43	2·60329	·38413	71·25735	27·37203	43
44	2·66186	·37568	73·86064	27·74771	44
45	2·72176	·36741	76·52251	28·11512	45
46	2·78300	°35932	79°24426	28·47444	46
47	2·84561	°35142	82°02726	28·82586	47
48	2·90964	°34369	84°87287	29·16955	48
49	2·97511	°33612	87°78251	29·50567	49
50	3·04205	°32873	90°75762	29·83440	50

For explanation see pp. (8-14).

Years	ONE 1	ONE POUND		ONE POUND PER ANNUM	
Tears	Amount	Present Value	Amount	Present Value	_ Year
51	3.11049	*32149	93.79966	30.15589	51
52	3.18048	*31442	96.91016	30.47031	52
53	3.25204	•30750	100.09064	30.77781	53
54	3.32521	•30073	103:34267	31.07854	54
55	3.40003	•29412	106.66788	31.37265	55
56	3:47653	•28764	110.06701	31.66030	56
57 58	3°55475	•28131	113.24444	31.94161	57
58	3.63473	.27512	117.09919	32.51623	58
59	3.71651	•26907	120.73392	32.48580	59
59 60	3.80013	•26315	124.45043	32.74895	60
61	3.88564	.25736	128.25057	33.00631	61
62	3.97306	.25169	132.13621	33.52800	62
63	4.06246	·24616	136.10927	33.23000	63
64	4.15386	•24074	140.17173	33.74490	64
65	4.24733	•23544	144.32559	33.98034	65
66	4.34289	•23026	148.57292	34.51060	66
67	4.44061	•22519	152.91581	34.43580	67
63	4.54052	•22024	157:35642	34.65604	68
69	4.64268	•21539	161.89694	34.87143	69
70	4.74714	•21065	166.53962	35.08208	70
71	4.85395	•20602	171.28676	35.58810	71
72	4.96317	•20148	176.14071	35.48959	
73	5.07484	19705	181.10388	35.68664	72
74	5.18902	19271	186.17871	35.87935	74
75	5.30577	18847	191.36774	36.06783	75
76	5.42515	.18433	196.67351	36.25215	76
77	5.54722	·18027	202.09866	36.43242	70
78	5.67203	17630	207.64588	36.60873	77
79 80	5.79965	17242	213.31792	36.78115	
80	5.93015	•16863	219.11757	36.94978	79
81	6.06357	•16492	225.04771	37.11470	81
82	6.50000	•16129	231.11129	37 27599	82
83	6.33950	·15774	237.31129	37.43373	83
84	6.48214	·15427	243.65080	37.58800	84
85	6.62799	·15088	250.13294	37.73888	85
86	6.77712	•14756	256.76093	37.88643	86
87	6.92961	•14431	263.53805	38.03074	87
88	7.08552	•14113	270.46766	38.17187	88
89	7 24495	•13803	277.55318	38.30990	89
90	7.40796	•13499	284.79813	38.44489	90
91	7.57464	·13202	292.20608	38.57691	91
92	7.74507	.12911	299.78072	38.70602	92
93	7.91933	•12627	307.52579	38.83230	93
94	8.09752	•12349	315.44512	38.95579	94
95	8.27971	12078	323.54263	39.07657	95
96	8,46600	.11815	331.82234	39.19469	96
97 98	8.65649	11552	340.28834	39.31021	97
	8.85126	.11298	348.94483	39.42319	98
99	9.05041	11049	357.79609	39.53368	99
00	9.25405	10806	366.84650	39.64174	100

fee also Tables on pp. (82-97).

Years	ONE I	OUND	ONE POUND	PER ANNUM	Years
	Amount	Present Value	Amount	Present Value	
1	1.02500	97561	1.00000	·97561	1
2	1.05062	95181	2.02500	1·92742	2
3	1.07689	92860	3.07562	2·85602	3
4	1.10381	90595	4.15252	3·76197	4
5	1.13141	88385	5.25633	4·64583	5
6 7 8 9	1·15969 1·18869 1·21840 1·24886 1·28008	86230 84127 82075 80073 78120	6·38774 7·54743 8·73612 9·95452 11·20338	5·50812 6·34939 7·17014 7·97087 8·75206	6 7 8 9
11	1·31209	•76214	12·48347	9·51421	11
12	1·34489	•74356	13·79555	10·25776	12
13	1·37851	•72542	15·14044	10·98318	13
14	1·41297	•70773	16·51895	11·69091	14
15	1·44830	•69047	17·93193	12·38138	15
16	1·48451	·67363	19·38022	13.05500	16
17	1·52162	·65720	20·86473	13.71220	17
18	1·55966	·64117	22·38635	14.35336	18
19	1·59865	62553	23·94601	14.97889	19
20	1·63862	·61027	25·54466	15.58916	20
21	1·67958	*59539	27·18327	16·18455	21
22	1·72157	*58086	28·86286	16·76541	22
23	1·76461	*56670	30·58443	17·33211	23
24	1·80873	*55288	32·34904	17·88499	24
25	1·85394	*53939	34·15776	18·42438	25
26 27 28 29 30	1·90029 1·94780 1·99650 2·04640	•52623 •51340 •50088 •48866 •47674	36.01171 37.91200 39.85980 41.85630 43.90270	18·95061 19·46401 19·96489 20·45355 20·93029	26 27 28 29 30
31	2·15000	*46511	46·00027	21·39540	31
32	2·20376	*45377	48·15028	21·84918	32
33	2·25885	*44270	50·35403	22·29188	33
34	2·31532	*43191	52·61289	22·72379	34
35	2·37321	*42137	54·92821	23·14516	35
36	2.43254	*41109	57·30141	23·55625	36
37	2.49335	*40107	59·73395	23·95732	37
38	2.55568	*39128	62·22730	24·34860	38
39	2.61957	*38174	64·78298	24·73034	39
40	2.68506	*37243	67·40256	25·10277	40
41	2.75219	*36335	70°08762	25.46612	41
42	2.82100	*35448	72°83981	25.82061	42
43	2.89152	*34584	75°66081	26.16645	43
44	2.96381	*33740	78°55232	26.50385	44
45	3.03790	*32917	81°51613	26.83302	45
46	3·11385	°32115	84.55403	27·15417	46
47	3·19169	°31331	87.66788	27·46748	47
48	3·27149	°30567	90.85958	27·77315	48
49	3·35328	°29822	94.13107	28·07137	49
50	3·43711	°29094	97.48435	28·36231	50

For explanation see pp. (8-14).

Years	ONE	POUND	ONE POUND	PER ANNUM	_ Years	
1 cars	Amount	Present Value	Amount	Present Value	lear	
51	3.52304	·28385	100°92146	28.64616	51	
52	3.61111	·27692	104°44449	28.92308	52	
53	3.70139	·27017	108°05561	29.19325	53	
54	3.79392	·26358	111°75700	29.45683	54	
55	3.88877	·25715	115°55092	29.71398	55	
56	3.98599	*25088	119·43969	29·96486	56	
57	4.08564	*24476	123·42569	30·20962	57	
58	4.18778	*23879	127·51133	30·44841	58	
59	4.29248	*23296	131·69911	30·68137	59	
60	4.39979	*22728	135·99159	30·90866	60	
61	4.50978	*22174	140·39138	31·13040	61	
62	4.62253	*21633	144·90116	31·34673	62	
63	4.73809	*21106	149·52369	31·55778	63	
64	4.85654	*20591	154·26179	31·76369	64	
65	4.97796	*20089	159·11833	31·96458	65	
66	5.10241	·19599	164*09629	32·16056	66	
67	5.22997	·19121	169*19869	32·35177	67	
68	5.36072	·18654	174*42866	32·53831	68	
69	5.49473	·18199	179*78938	32·72030	69	
70	5.63210	·17755	185*28411	32·89786	70	
71	5.77291	•17322	190·91622	33.07108	71	
72	5.91723	•16900	196·68912	33.24008	72	
73	6.06516	•16488	202·60635	33.40495	73	
74	6.21679	•16085	208·67151	33.56581	74	
75	6.37221	•15693	214·88829	33.72274	75	
76	6.53151	15310	221·26050	33.87584	76	
77	6.69480	14937	227·79201	34.02521	77	
78	6.86217	14573	234·48681	34.17094	78	
79	7.03372	14217	241·34898	34.31311	79	
80	7.20957	13870	248·38271	34.45182	80	
81 82 83 84 35	7·38981 7·57455 7·76392 7·95801 8·15696	13532 13202 12880 12566	255·59228 262·98209 270·55664 278·32056 286·27857	34.58714 34.71916 34.84796 34.97362 35.09621	81 82 83 84 85	
86	8·36089	11960	294'43553	35.21582	86	
87	8·56991	11669	302'79642	35.33251	87	
88	8·78416	11384	311'36633	35.44635	88	
89	9·0376	11106	320'15049	35.55741	89	
90	9·22886	10836	329'15425	35.66577	90	
91 92 93 94 95	9.45958 9.69607 9.93847 10.18693 10.44160	10571 10313 10062 09817	338·38311 347·84269 357·53875 367·47722 377·66415	35.77148 35.87462 35.97523 36.07340 36.16917	91 92 93 94 95	
96 97 98 99	10°70264 10°97021 11°24447 11°52558 11°81372	*09343 *09116 *08893 *08676 *08465	388·10576 398·80840 409·77861 421·02308 432·54865	36·26261 36·35376 36·44269 36·52946 36·61410	96 97 98 99	

See also Tables on pp. (82-97).

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
rears	Amount	Present Value	Amount	Present Value	1 cars
I	1.02750	97324	1.00000	0.97324	I
2	1.05576	.94719	2.02750	1.92042	2
3	1.08479	92184	3.08326	2.84226	3
4	1.11465	.89717	4.16805	3.73943	4
5	1.14527	.87315	5.28267	4.61258	5
6	1.17677	·84978	6.42794	5.46237	6
	1.50013	.82704	7.60471	6.28941	7
7 8	1.24238	*80491	8.81384	7.09431	7 8
9	1.27655	•78336	10.05622	7.87768	9
10	1.31165	.76240	11.33276	8.64008	10
10					
II .	1.34772	'74199	12.64442	9.38207	II
12	1.38478	.72213	13.99214	10.10420	12
13	I .42287	.70281	15.37692	10.80701	13
14	1.46199	.68400	16.79979	11.49101	14
15	1.20220	.66569	18.26178	12.15670	15
16	1.54351	.64787	19.76398	12.80457	16
	1.58596	•63053	21.30749	13.43511	17
17 18	1.62957	.61366	22.89344	14.04877	18
	1.67438	*59723	24.2301	14.64600	
19	1.72043	.58125	26.19740	15.22725	19
20			77.		20
21	1.76774	•56569	27.91783	15.79295	21
22	1.81635	.55055	29.68557	16.34350	22
23	1.86630	•53582	31.20192	16·34350 16·87932	23
24	1.91763	.52148	33.36822	17.40080	24
25	1.97036	.50752	35.28585	17.90832	25
	0:00455	140204	37.25621	18.40226	26
26	2.02455	*49394 *48072	39.28075	18.88297	
27					27
28	2.13743	•46785	41.36098	19.35083	
29	2.19621	*45533	43.49840	19.80616	29
30	2.25660	*44314	45.69461	20.24930	30
31	2.31866	·43128	47.95121	20.68059	31
32	2.38242	'41974	50.26987	21.10033	32
33	2.44794	.40851	52.65229	21.20883	33
34	2.51526	39757	55.10053	21.90641	34
35	2.58443	•38693	57.61548	22.29334	35
36	2.65550	*37658	60.19991	22.66992	36
30	2.72852	*36650	62.85541	23.03642	
37 38	2.80356				37 38
30		*35669	65.58393	23.39311	
39	2.88066	34714	68.38749	23.74025	39
40	2.95987	*33785	71.26812	24.07810	40
41	3.04127	·32881	74.22802	24.40691	41
42	3.12491	·3200I	77.26929	24.72692	42
43	3.21084	'31144	80.39419	25.03837	43
44	3.29914	.30311	83.60504	25.34147	44
45	3.38986	29500	86.90417	25.63647	45
46	3.48309	.28710	90*29404	25.92357	46
47	3.57887	27942	93.77712	26.5050	47
48	3.67729	27194	97.35600	26.47493	48
	3.77842	26466	101.03359	26.73959	
49	3.88232	25758	104.81170	26.99717	49
50	3 00232	25/50	104 011/0	20 99/1/	50

For explanation see pp. (8-14). (120)

Years _	ONE	POUND	ONE POUND	ONE POUND PER ANNUM	
	Amount	Present Value	Amount	Present Value	Year
51	3.98909	•25068	108.69402	27.24785	51
52	4.09879	*24397	112.68311	27.49183	52
53	4.21150	*23744	116.78189	27.72927	53
54	4.32732	23109	120.99340	27.96036	54
55	4.44632	·2249I	125.32071	28.18527	55
56	4.56859	·21889	129.76703	28.40415	56
57	4.69423	*21303	134.33563	28.61718	57
58	4.82332	20733	139.02986	28.82451	58
59	4.95596	20178	143.85318	29.02628	59
60	5.09225	•19638	148.80914	29.22266	60
61	5.23229	*19112	153.90139	29.41378	61
62	5.37618	.18601	159.13368	29.59979	62
63	5.52402	18103	164.50986	29.78082	63
64	5.67593	•17618	170.03388	29.95700	64
65	5.83202	17147	175.70981	30.12846	65
66	5.99240	16688	181.54183	30.29534	66
67	6.15719	16241	187.53423	30.45772	67
68	6.32621	15806	193.69142	30.61582	68
69	6.50049	•15383	200.01793	30.76965	69
70	6.67926	14972	206.51843	30.91937	70
71	6.86294	*14571	213.19768	31.06508	71
72	7.05167	14181	220.06062	31.50689	72
73	7.24559	*13802	227.11229	31.34491	73
74	7.44484	13432	234.35788	31.47923	74
75	7.64957	13073	241.80272	31.60995	75
76	7.85994	12723	249.45229	31.73718	76
77	8.07609	12382	257.31223	31.86100	77
78	8,29818	12051	265.38832	31.98151	78
79	8.52638	11728	273.68649 282.21287	32.09880	79 80
80	8.76085	11414	•	32.21294	
81	9.00178	·11109 ·10812	290.97373	32.32403	81
82	9°24933 9°50368	10512	299 [.] 97551 309 [.] 22483	32.43214	82
83	9.76503	10322	318.72851	32·53737 32·63977	83
84 85	10.03322	*09967	328.49355	32.73944	84
86	10.30920	*09700 *09440	338·52712 348·83662	32·83644 32·93084	86
87 88	10.88431	09440	359.42962	33.02271	87 88
89	11.18363	.08942	370.31394	33.11513	89
90	11.49118	.08702	381.49757	33.19912	90
91	11.80719	.08469	392.98876	33.28385	01
92	12.13189	.08243	404.79595	33.36628	92
93	12.46552	.08022	416.92783	33.44650	93
94	12.80832	.07807	429.39335	33.52457	94
95	13.16055	07598	442.20167	33.60056	95
96	13.52246	.07395	455.36221	33.67451	96
97 98	13.89433	.07197	468.88467	33.74648	97
98	14.27642	.07002	482 77900	33.81652	98
99	14.66902	•06817	497.05542	33.88469	99
00	15.07242	*06635	511.72445	33.95104	100

See also Tables on pp. (82-97).
(121)

Years	ONE POUND		ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	
I	1.03000	•97087	1.00000	.97087	1
2	1.06090	•94260	2.03000	1.91347	2
3	1'09273	91514	3.09090	2.82861	3
4	1.12221	88849	4.18363	3.71710	4
5	1.15927	.86261	5.30914	4.57971	5
6	1.19402	83748	6.46841	5.41719	6
7	1.22987	*81309	7.66246	6.23028	7 8
7 8	1.26677	.78941	8.89234	7.01969	
9	1.30477	.76642	10.12011	7.78611	9
10	1.34392	.74409	11.46388	8.53020	10
II	1.38423	'72242	12.80780	9.25262	II
12	1.42576	.70138	14.19203	9.95400	12
13	1.46853	.68095	15.61779	10.63496	13
14	1.51259	.66112	17.08632	11.29607	14
15	1.55797	64186	18.59891	11.93794	15
16	1.60471	.62317	20.15688	12.26110	16
17	1.65285	. 60502	21.76159	13.16615	17
18	1.70243	.58739	23.41444	13.75351	18
19	1.75351	.57029	25.11684.	14.32380	19
20	1.80611	.55368	26.87037	14.87748	20
21	1.86029	.53755	28.67649	15.41502	21
22	1.91610	.52189	30.53678	15.93692	22
23	1.97359	•50669	32.45288	16.44361	23
24	2.03279	*49193	34.42647	16.93554	24
25	2.09378	*47761	36.45926	17.41315	25
26	2.15659	*46369	38.55304	17.87684	26
27	2.22129	°45019	40.70963	18.32703	27
27 28	2.28793	*43708	42.93092	18.76411	28
29	2.35657	'42435	45.21885	19.18846	29
30	2.42726	.41199	47.57542	19.60044	30
31	2.50008	*39999	50.00268	20.00043	31
32	2.57508	*38834	52.50276	20.38877	32
33	2.65234	*37703	55.07784	20.76579	33
34	2.73191	*36604	57.73018	21.13184	34
35	2.81386	.35538	60.46208	21.48722	35
36	2:89828	*34503	63.27594	21.83225	36
37	2.98523	*33498	66.17422	22.16724	37
38	3.07478	'32523	69.15945	22.49246	38
39	3.16203	*31575	72.23423	22.80822	39
40	3.26204	•30656	75.40126	23.11477	40
41	3.35990	*29763	78.66330	23.41240	41
42	3.46070	•28896	82.02320	23.70136	42
43	3.26452	*28054	85.48389	23.98190	43
44	3.67145	*27237	89.04841	24.25427	44
45	3.78160	.26444	92.71986	24.51871	45
46	3.89504	.25674	96.20146	24.77545	46
47	4.01190	*24926	100.39650	25.02471	47
48	4.13225	*24200	104.40840	25.26671	
49	4.25622	*23495	108.54065	25.20166	49
50	4.38391	*22811	112.79687	25.72976	50

For explanation see pp. (8-14).

	ONE I	OUND	ONE POUND	PER ANNUM	Years
Years _	Amount	Present Value	Amount	Present Value	Tears
51	4.51542	·22146	117·18077	25.95123	51
52	4.65089	·21501	121·69620	26.16624	52
53	4.79041	·20875	126·34708	26.37499	53
54	4.93412	·20267	131·13749	26.57766	54
55	5.08215	·19677	136·07162	26.77443	55
56	5.23461	·19104	141·15377	26.96546	56
57	5.39165	·18547	146·38838	27.15094	57
58	5.55340	·18007	151·7800 3	27.33101	58
59	5.72000	·17483	157·33343	27.50583	59
60	5.89160	·16973	163·05344	27.67556	60
61	6.06835	*16479	168°94504	27.84035	61
62	6.25040	*15999	175°01339	28.00034	62
63	6.43791	*15533	181°26379	28.15567	63
64	6.63105	*15081	187°70171	28.30648	64
65	6.82998	*14641	194°33276	28.45289	65
66	7·03488	*14215	201·16274	28·59504	66
67	7·24593	*13801	208·19762	28·73305	67
68	7·46331	*13399	215·44355	28·86704	68
69	7·68721	*13009	222·90686	28·99712	69
70	7·91782	*12630	230·59406	29·12342	70
71	8·15536	*12262	238·51189	29·24604	71
72	8·40002	*11905	246·66724	29·36509	72
73	8·65202	*11558	255·06726	29·48067	73
74	8·91158	*11221	263·71928	29·59288	74
75	9·17893	*10895	272·63086	29·70183	75
76	9.45429	*10577	281·80978	29·80760	76
77	9.73792	*10269	291·26407	29·91029	77
78	10.03006	*b9970	301·00200	30·00999	78
79	10.33096	*09680	311·03206	30·10679	79
80	10.64089	*09398	321·36302	30·20076	80
81	10·96012	*09124	332·00391	30·29200	81
82	11·28892	*08858	342·96403	30·38059	82
83	11·62759	*08600	354·25295	30·46659	83
84	11·97642	*08350	365·88054	30·55009	84
85	12·33571	*08107	377·85695	30·63115	85
86	12·70578	*07870	390·19266	30·70986	86
87	13·08695	*07641	402·89844	30·78627	87
88	13·47956	*07419	415·98539	30·86045	88
89	13·88395	*07203	429·46495	30·93248	89
90	14·30047	*06993	443·34890	31·00241	90
91	14·72948	*06789	457.64937	31.07030	91
92	15·17137	*06591	472.37885	31.13621	92
93	15·62651	*06399	487.55022	31.20021	93
94	16·09530	*06213	503.17672	31.26234	94
95	16·57816	*06032	519.27203	31.32266	95
96 97 98 99	17.07551 17.58777 18.11540 18.65887 19.21863	•05856 •05686 •05520 •05359 •05203	535.85019 552.92569 570.51346 588.62887 607.28773	31·38122 31·43808 31·49328 31·54687 31·59891	96 97 98 99

Years	ONE	POUND	ONE POUND	PER ANNUM	
Tears	Amount	Present Value	Amount	Present Value	Years
1	1.03250	•96852	1.00000	0·96852	1
2	1.06606	•93804	2.03250	1·90656	2
3	1.10070	•90851	3.09856	2·81507	3
4	1.13648	•87991	4.19926	3·69498	4
5	1.17341	•85222	5.33574	4·54720	5
6	1·21155	·82539	6·50915	5*37259	6
7	1·25092	·79941	7·72069	6·17200	7
8	1·29158	·77425	8·97162	6·94625	8
9	1·33355	·74988	10·26319	7·69612	9
10	1·37689	·72627	11·59675	8·42240	10
11 12 13 14 15	1·42164 1·46785 1·51555 1·56481 1·61566	•70341 •68127 •65983 •63906 •61894	12·97364 14·39529 15·86313 17·37868 18·94349	9·12581 9·80708 10·46690 11·10596	11 12 13 14 15
16	1.66817	·59946	20·55915	12·32436	16
17	1.72239	·58059	22·22733	12·90495	17
18	1.77837	·56231	23·94972	13·46726	18
19	1.83616	·54461	25·72808	14·01187	19
20	1.89584	·52747	27·56424	14·53935	20
21	1.95745	·51087	29·46008	15.05021	21
22	2.02107	·49479	31·41753	15.54500	22
23	2.08675	·47921	33·43860	16.02421	23
24	2.15457	·46413	35·52536	16.48834	24
25	2.22460	·44952	37·67993	16.93786	25
26	2·29690	·43537	39·90453	17·37323	26
27	2·37155	·42167	42·20143	17·79490	27
28	2·44862	·40839	44·57297	18·20329	28
29	2·52820	·39554	47·02160	18·59883	29
30	2·61037	·38309	49·54980	18·98192	30
31	2.69521	·37103	52·16017	19·35295	31
32	2.78280	·35935	54·85537	19·71230	32
33	2.87324	·34804	57·63817	20·06034	33
34	2.96662	·33708	60·51141	20·39742	34
35	3.06304	·32647	63·47803	20·72389	35
36	3·16258	·31620	66·54107	21·04009	36
37	3·26537	·30624	69·70365	21·34633	37
38	3·37149	·29660	72·96902	21·64294	38
39	3·48107	·28727	76·34052	21·93021	39
40	3·59420	·27823	79·82158	22·20843	40
41	3.71101	·26947	83*41578	22·47790	41
42	3.83162	·26099	87*12680	22·73889	42
43	3.95615	·25277	90*95842	22·99166	43
44	4.08472	·24481	94*91457	23·23647	44
45	4.21748	·23711	98*99929	23·47358	45
46	4·35454	•22965	103·21677	23·70323	46
47	4·49607	•22242	107·57131	23·92564	47
48	4·64219	•21542	112·06738	24·14 1 06	48
49	4·79306	•20863	116·70957	24·34969	49
50	4·94884	•20207	121·50263	24·5517 6	50

37	ONE	POUND	ONE POUND	PER ANNUM	
Years	Amount	Present Value	Amount	Present Value	Years
51	5·10967	*19571	126·45147	24.74747	51
52	5·27574	*18955	131·56114	24.93702	52
53	5·44720	*18358	136·83688	25.12060	53
54	5·62423	*17780	142·28407	25.29840	54
55	5·80702	*17221	147·90831	25.47060	55
56	5.99575	•16678	153.71533	25.63739	56
57	6.19061	•16153	159.71107	25.79892	57
58	6.39180	•15645	165.90168	25.95537	58
59	6.59954	•15153	172.29349	26.10690	59
60	6.81402	•14676	178.89303	26.25366	60
61	7.03548	•14214	185.70705	26·39579	61
62	7.26413	•13766	192.74253	26·53346	62
63	7.50022	•13333	200.00666	26·66679	63
64	7.74397	•12913	207.50688	26·79592	64
65	7.99565	•12507	215.25085	26·92099	65
66	8·25551	•12113	223·24650	27·04212	66
67	8·52382	•11732	231·50202	27·15944	67
68	8·80084	•11363	240·02583	27·27306	68
69	9·08687	•11005	248·82667	27·38311	69
70	9·38219	•10658	257·91354	27·48969	70
71	9.68711	•10323	267·29573	27·59292	71
72	10.00194	•09998	276·98284	27·69291	72
73	10.32701	•09683	286·98478	27·78974	73
74	10.66263	•09379	297·31179	27·88352	74
75	11.00917	•09083	307·97442	27·97436	75
76	11·36697	•08797	318·98359	28·06233	76
77	11·73639	•08521	330·35056	28·14754	77
78	12·11783	•08252	342·08695	28·23006	78
79	12·51166	•07993	354·20477	28·30999	79
80	12·91828	•07741	366·71643	28·38740	80
81	13·33813	•07497	379·63471	28·46237	81
82	13·77162	•07261	392·97284	28·53498	82
83	14·21919	•07033	406·74446	28·60531	83
84	14·68132	•06811	420·96365	28·67342	84
85	15·15846	•06597	435·64497	28·73939	85
86	15.651f1	•06389	450·80343	28.80329	86
87	16.15977	•06188	466·45455	28.86517	87
88	16.68497	•05993	482·61432	28.92510	88
89	17.22723	•05805	499·29928	28.98315	89
90	17.78711	•05622	516·52651	29.03937	90
91	18·36519	•05445	534·31362	29.09382	91
92	18·96206	•05274	552·67881	29.14656	92
93	19·57833	•05108	571·64088	29.19763	93
94	20·21462	•04947	591·21920	29.24710	94
95	20·87160	•04791	611·43383	29.29502	95
96	21·54993	*04640	632·30543	29·34142	96
97	22·25030	*04494	653·85535	29·38636	97
98	22·97343	*04353	676·10565	29·42989	98
99	23·72007	*04216	699·07909	29·47205	99
100	24·49097	*04083	722·79916	29·51288	100

Years	ONE :	POUND	ONE POUND	PER ANNUM	Years
Tears _	Amount	Present Value	Amount	Present Value	
I	1.03500	.06618	I .00000	.96618	1
2	1.07122	.93351°	2.03500	1.89969	2
3	1.10872	.90194	3.10653	2.80164	3
4	1.14752	.87144	4.51494	3.67308	4
5	1.18769	.84197	5.36247	4.21202	.5
6	1.22926	·81350	6.22012	5.32855	6
7	1.27228	.78599	7.77941	6.11454	7 8
7 8	1.31681	75941	9.05169	6.87396	8
9	1.36290	73373	10.36820	7.60769	9
10	1.41060	70892	11.73139	8.31661	10
II	1.45997	68495	13.14199	9.00155	11
12	1.21107	.66178	14.60196	9.66333	12
13	1.56396	63940	16.11303	10.30274	13
14	1.61869	.61778	17.67699	10.92052	14
15	1.67535	.59689	19.29568	11.21741	15
16	1.73399	.57671	20.97103	12.00412	16
	1.79467	.55720	22.70501	12.65132	17
17	1 ·85749	.53836	24.49969	13.18968	18
		.2016	26.35718	13.70984	19
19	1 ·92250 1 ·98979	50257	28.27968	14.51540	20
21		.48557	30.26947	14.69797	21
	2.05943			15.16213	22
22	2.13121	46915	32.32890	15.62041	
23		45329	34.46041	16.05837	23
24 25	2·28333 2·36324	'43796 '42315	36.66653	16.48152	25
26	2.44596	40884	41.31310	16.89035	26
		39501	43.75906	17.28537	27
27 28	2.53157	38165	46.29063	17.66702	28
		36875		18.03577	29
29	2.71188		48.91080	18.39205	-
30	2.80679	.35628	51.62267		30
31	2.90503	*34423	54.42947	18.73628	31
32	3.00611	*33259	57.33450	19.06887	32
33	3.11194	.32134	60.34121	19.39021	33
34	3.22086	*31048	63.45315	19.70068	34
35	3.33359	29998	66.67401	20.00066	35
36	3.45027	.28983	70.00760	20.29049	36
37	3.57103	*28003	73.45787	20.57053	37
38	3.69601	27056	77.02889	20.84109	38
39	3.82537	.26141	80.72490	21.10220	39
40	3.95926	*25257	84.55028	21.35507	40
41	4.09783	*24403	88.50953	21.59910	41
42	4.24126	.23578	92.60737	21.83488	42
43	4.38970	.22781	96.84863	22.06269	43
44	4.24334	'22010	101.53833	22.28279	44
45	4.70236	.21266	105.78167	22.49545	45
46	4.86694	.20547	110.48403	22.70092	46
47	5.03728	19852	115.35097	22.89944	47
48	5.21359	.19181	120.38826	23.09125	48
49	5.39606	18532	125.60184	23:27657	49
50	5.58493	17905	130.99791	23.45562	50

Years	ONE POUND		ONE POUND PER ANNUM		Years
1 Cars	Amount	Present Value	Amount	Present Value	_ rears
51	5.78040	17300	136.58283	23.62862	51
52	5.98271	.16714	142 36324	23.79577	52
53	6.19211	•16150	148.34595	23.95726	53
54	6.40883	15603	154.53805	24.11330	54
55	6.63314	.12076	160.94689	24.26405	55
56	6.86530	•14566	167.58003	24.40971	56
57	7.10559	14073	174.44533	24.55045	57
58	7.35428	13598	181.55092	24.68642	58
59 60	7.61168	13138	188.90520	24.81780	59
60	7.87809	.12693	196.51688	24.94474	66
61	8.15382	12264	204.39497	25.06738	61
62	8.43921	11849	212.54879	25.18587	62
63	8.73458	11449	220.98800	25.30036	63
64	9.04029	11062	229.72258	25.41097	64
65	9.35670	.10688	238.76287	25.51785	65
66	9.68418	10326	248.11957	25.62111	66
67	10.02313	•09977	257.80376	25.72088	67
68	10.37394	•09640	267.82689	25.81728	68
69	10.73703	.09314	278.20083	25.91041	69
70	11.11582	.08999	288.93786	26.00040	70
71	11.20177	.08694	300.05069	26.08734	71
72	11.90434	*08400	311.55244	26.17134	72
73	12:32099	·08i16	323.45680	26.25251	73
74	12.75222	.07842	335.77778	26.33092	74
75	13.19855	.07577	348.53001	26.40669	75
76	13.66050	.07320	361.72856	26.47989	76
77	14.13862	.07073	375.38906	26.55062	77
77 78	14.63347	.06834	389.52768	26.61896	78
79 80	15.14564	*06603	404.16115	26.68498	70
80	15.67574	•06379	419.30678	26.74878	79 80
81	16.22439	.06164	434.98252	26.81041	81
82	16.79224	.05955	451.20691	26.86996	82
83	17:37997	*05754	467.99915	26.92750	83
84	17.98827	*05559	485.37912	26.98309	84
85	18.61786	.05371	503.36739	27.03680	85
86	19°26948	.05190	521.98525	27.08870	86
87	19.94391	*05014	541.25474	27.13884	87
88	20.64195	.04845	561.19865	27.18729	88
89	21.36442	·04681	581.84060	27.23409	89
90	22.11212	.04522	603.20503	27.27932	90
91	22.88610	.04369	625:31720	27.32301	QI
92	23.68711	04222	648.20330	27.36523	92
93	24.21616	*04079	671.89042	27.40602	93
94	25.37423	°0394I	696.40658	27.44543	93
95	26.26233	.03808	721.78082	27.48351	95
96	27.18151	•03679	748.04314	27:52029	96
97	28.13286	*03555	775.22465	27.55584	97
98	29.11751	.03434	803.35752	27.59018	98
99	30.13662	*03318	832.47503	27.62337	
100	31.19141	*03206	862.61166	27.65543	99

	ONE I	POUND	ONE POUND	PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	1000
1	1.03750	•96386	1.00000	0·96386	1
2	1.07641	•92902	2.03750	1·89287	2
3	1.11677	•89544	3.11391	2·78831	3
4	1.15865	•86307	4.23068	3·65138	4
5	1.20210	•83188	5.38933	4·48326	5
6 7 8 9	1·24718 1·29395 1·34247 1·39281 1·44504	·80181 ·77283 ·74490 ·71797 ·69202	6·59143 7·83861 9·13255 10·47503 11·86784	5·28507 6·05790 6·80280 7·52077 8·21279	6 7 8 9 10
11	1·49923	•66701	13·31288	8·87979	11
12	1·55545	•64290	14·81212	9·52269	12
13	1·61378	•61966	16·36757	10·14236	13
14	1·67430	•59726	17·98135	10·73962	14
15	1·73709	•57568	19·65565	11·31530	15
16	1.80223	•55487	21·39274	11.87017	16
17	1.86981	•53481	23·19497	12.40498	17
18	1.93993	•51548	25·06478	12.92046	18
19	2.01268	•49685	27·00471	13.41731	19
20	2.08815	•47889	29·01739	13.89620	20
21	2·16646	•46158	31·10554	14·35779	21
22	2·24770	•44490	33·27200	14·80269	22
23	2·33199	•42882	35·51970	15·23151	23
24	2·41944	•41332	37·85168	15·64482	24
25	2·51017	•39838	40·27112	16·04320	25
26	2.60430	•38398	42.78129	16·42718	26
27	2.70196	•37010	45.38559	16·79729	27
28	2.80328	•35672	48.08755	17·15401	28
29	2.90841	•34383	50.89083	17·49784	29
30	3.01747	•33140	53.79924	17·82925	30
31	3·13063	·31942	56·81671	18·14867	31
32	3·24803	·30788	59·94734	18·45655	32
33	3·36983	·29675	63·19536	18·75330	33
34	3·49619	·28603	66·56519	19·03933	34
35	3·62730	·27569	70·06138	19·31501	35
36	3.76333	•26572	73.68868	19·58074	36
37	3.90445	•25612	77.45201	19·83685	37
38	4.05087	•24686	81.35646	20·08371	38
39	4.20277	•23794	85.40733	20·32165	39
40	4.36038	•22934	89.61010	20·55099	40
41	4·52389	•22105	93·97048	20·77204	41
42	4·69354	•21306	98·49437	20·98510	42
43	4·86955	•20536	103·18791	21·19046	43
44	5·05215	•19794	108·05746	21·38839	44
45	5·24161	•19078	113·10961	21·57917	45
46	5.43817	•18389	118·35122	21.76306	46
47	5.64210	•17724	123·78939	21.94030	47
48	5.85368	•17083	129·43150	22.11113	48
49	6.07319	•16466	135·28518	22.27579	49
50	6.30094	•15871	141·35837	22.43449	50

Years	ONE	POUND	ONE POUNI	PER ANNUM	}
	Amount	Present Value	Amount	Present Value	_ Years
51	6·53722	·15297	147·65931	22·58746	51
52	6·78237	·14744	154·19653	22·73490	52
53	7·03671	·14211	160·97890	22·87702	53
54	7·30059	·13698	168·01561	23·01399	54
55	7·57436	·13202	175·31620	23·14602	55
56	7.85840	•12725	182·89056	23·27327	56
57	8.15309	•12265	190·74895	23·39592	57
58	8.45883	•11822	198·90204	23·51414	58
59	8.77603	•11395	207·36086	23·62809	59
60	9.10513	•10983	216·13690	23·73792	60
61	9.44658	*10586	225·24203	23.84377	61
62	9.80082	*10203	234·68861	23.94581	62
63	10.16835	*09834	244·48943	24.04415	63
64	10.54967	*09479	254·65778	24.13894	64
65	10.94528	*09136	265·20745	24.23030	65
66	11·35573	•08806	276·15273	24·31837	66
67	11·78157	•08488	287·50846	24·40324	67
68	12·22338	•08181	299·29002	24·48505	68
69	12·68175	•07885	311·51340	24·56391	69
70	13·15732	•07600	324·19515	24·63991	70
71	13.65072	•07326	337·35247	24.71317	71
72	14.16262	•07061	351 00319	24.78378	72
73	14.69372	•06806	365·16581	24.85183	73
74	15.24473	•06560	379·85952	24.91743	74
75	15.81641	•06323	395·10426	24.98065	75
76	16·40952	*06094	410.92067	25.04159	76
77	17·02488	*05874	427.33019	25.10033	77
78	17·66332	*05661	444.35507	25.15695	78
79	18·32569	*0545 7	462.01839	25.21151	79
80	19·01290	*05260	480.34408	25.26411	80
81	19·72589	•05069	499·35698	25·31481	81
82	20·46561	•04886	519·08287	25·36367	82
83	21·23307	•04710	539·54848	25·41076	83
84	22·02931	•04539	560·78154	25·45616	84
85	22·85541	•04375	582·81085	25·49991	85
86 87 88 89 90	23.71248 24.60170 25.52427 26.48143 27.47448	*04217 *04065 *03918 *03776 *03640	605·66626 629·37874 653·98045 679·50471 705·98614	25·54208 25·58273 25·62191 25·65967	86 87 88 89 90
91	28·50477	.03508	733·46062	25·7311 5	91
92	29·57370	.03381	761·96539	25·76496	92
93	30·68272	.03259	791·53909	25·79756	93
94	31·83332	.03141	822·22181	25·8289 7	94
95	33·02707	.03028	854·05513	25·8592 5	95
96 97 98 99 00	34·26558 35·55054 36·88369 38·26683 39·70183	•02918 •02813 •02711 •02613 •02519	887.08220 921.34778 956.89832 993.78201 1032.04883	25.88843 25.91656 25.94367 25.96981 25.99499	96 97 98 99

	ONE PO	UND	ONE POUND	PER ANNUM	Years
Years _	Amount	Present Value	Amount	Present Value	
1	1.04000	*96154	1.00000	·96154	1
2	1.08160	*92456	2.04000	1·88609	2
3	1.12486	*88900	3.12160	2·77509	3
4	1.16986	*85480	4.24646	3·62990	4
5	1.21665	*82193	5.41632	4·45182	5
6 7 8 9	1.26532 1.31593 1.36857 1.42331 1.48024	.79031 .75992 .73069 .70259 .67556	6.63298 7.89829 9.21423 10.58280 12.00611	5.24214 6.00205 6.73275 7.43533 8.11090	6 7 8 9
11	1.53945	•64958	13.48635	8·76048	11
12	1.60103	•62460	15.02581	9·38507	12
13	1.66507	•60057	16.62684	9·98565	13
14	1.73168	•57748	18.29191	10·56312	14
15	1.80094	•55526	20.02359	11·11839	15
16	1.87298	*53391	21.82453	11.65230	16
17	1.947,90	*51337	23.69751	12.16567	17
18	2.02582	*49363	25.64541	12.65930	18
19	2.10685	*47464	27.67123	13.13394	19
20	2.19112	*45639	29.77808	13.59033	20
21	2·27877	·43883	31 ·96920	14.02916	21
22	2·36992	·42196	34 ·24797	14.45112	22
23	2·46472	·40573	36 ·61789	14.85684	23
24	2·56330	·39012	39 ·08260	15.24696	24
25	2·66584	·37512	41 ·64591	15.62208	25
26	2.77247	·36069	44.31174	15.98277	26
27	2.88337	·34682	47.08421	16.32959	27
28	2.99870	·33348	49.96758	16.66306	28
29	3.11865	·32065	52.96629	16.98372	29
30	3.24340	·30832	56.08494	17.29203	30
31	3·37313	·29646	59·32834	17·58849	31
32	3·50806	·28506	62·70147	17·87355	32
33	3·64838	·27409	66·20953	18·14765	33
34	3·79432	·26355	. 69·85791	18·41120	34
35	3·94609	·25342	73·65222	18·66461	35
36	4.10393	·24367	77.59831	18·90828	36
37	4.26809	·23430	81.70225	19·14258	37
38	4.43881	·22529	85.97034	19·36787	38
39	4.61637	·21662	90.40915	19·58449	39
40	4.80102	·20829	95.02552	19·79277	40
41	4.99306	·20028	99.82654	19 ⁹ 9305	41
42	5.19278	·19257	104.81960	20 ¹ 8563	42
43	5.40050	·18517	110.01238	20 ³ 7080	43
44	5.61652	·17805	115.41288	20 ⁵ 4884	44
45	5.84118	·17120	121.02939	20 ⁷ 2004	45
46	6.07482	•16461	126.87057	20.88465	46
47	6.31782	•15828	132.94539	21.04294	47
48	6.57053	•15219	139.26321	21.19513	48
49	6.83335	•14634	145.83373	21.34147	49
50	7.10668	•14071	152.66708	21.48219	50

Years	ONE POUND		ONE POUN	D PER ANNUM	i
	Amount	Present Value	Amount	Present Value	_ Year
51	7·39095	°13530	159.77377	21.61749	51
52	7·68659	°13010	167.16472	21.74758	52
53	7·99405	°12509	174.85131	21.87268	53
54	8·31381	°12028	182.84536	21.99296	54
55	8·64637	°11566	191.15917	22.10861	55
56	8·99222	11121	199.80554	22.21982	56
57	9·35191	10693	208.79776	22.32675	57
58	9·72599	10282	218.14967	22.42957	58
59	10·11503	109886	227.87566	22.52843	59
60	10·51963	109506	237.99069	22.62349	60
61	10·94041	*09140	248·51031	22.71490	61
62	11·37803	*08789	259·45073	22.80278	62
63	11·83315	*08451	270·82875	22.88729	63
64	12·30648	*08126	282·66190	22.96855	64
65	12·79874	*07813	294·96838	23.04668	65
66 67 68 69 70	13·31068 13·84311 14·39684 14·97271 15·57162	*07513 *07224 *06946 *06679 *06422	307 ·76712 321 ·07780 334 ·92091 349 ·31775 364 ·29046	23.12181 23.19405 23.26351 23.33030 23.39452	66 67 68 69
71	16·19448	*06175	379.86208	23.45627	71
72	16·84226	*05937	396.05656	23.51564	72
73	17·51595	*05709	412.89892	23.57273	73
74	18·21659	*05490	430.41478	23.62763	74
75	18·94525	*05278	448.63137	23.68041	75
76	19.70307	°05075	467·57662	23.73116	76
77	20.49119	°04880	487·27969	23.77996	77
78	21.31084	°04692	507·77087	23.82689	78
79	22.16327	°04512	529·08171	23.87201	79
80	23.04980	°04338	551·24498	23.91539	80
81	23.97179	°04172	574.29478	23.95711	81
82	24.93066	°04011	598.26657	23.99722	82
83	25.92789	°03 ⁸ 57	623.19723	24.03579	83
84	26.96500	°03709	649.12512	24.07287	84
85	28.04360	°03566	676.09012	24.10853	85
86	29·16535	*03429	704·13373	24.14282	86
87	30·33196	*03297	733·29908	24.17579	87
88	31·54524	*03170	763·63104	24.20749	88
89	32·80705	*03048	795·17628	24.23797	89
90	34·11933	*02931	827·98333	24.26728	90
91	35'48411	°02818	862·10267	24·29546	91
92	36'90347	°02710	897·58677	24·32256	92
93	38'37961	°02606	934·49024	24·34861	93
94	39'91479	°02505	972·86985	24·37367	94
95	41'51139	°02409	1012·78465	24·39776	95
06 07 08 09 0	43°17184 44°89872 46°69467 48°56245 50°50495	*02316 *02227 *02142 *02059 *01980	105.4·29603 1097·46788 1142·36659 1189·06125 1237·62370	24·42092 24·44319 24·46461 24·48520 24·50500	96 97 98 99

	ONE	POUND	ONE POUND	PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	
1	1.04250	·95923	1.00000	0·95923	1
2	1.08681	·92013	2.04250	1·87936	2
3	1.13300	·88262	3.12931	2·76198	3
4	1.18115	·84663	4.26230	3·60861	4
5	1.23135	·81212	5.44345	4·42073	5
6	1·28368	•77901	6·67480	5·19974	6
7	1·33824	•74725	7·95848	5·94699	7
8	1·39511	•71679	9·29671	6·66378	8
9	1·45440	•68757	10·69182	7·35135	9
10	1·51621	•65954	12·14622	8·01089	10
11	1·58065	•63265	13.66244	8·64354	11
12	1·64783	•60686	15.24309	9·25039	12
13	1·71786	•58212	16.89092	9·83251	13
14	1·79087	•55839	18.60879	10·39090	14
15	1·86699	•53562	20.39966	10·92652	15
16	1.94633	•51379	22·26665	11·44031	16
17	2.02905	•49284	24·21298	11·93315	17
18	2.11529	•47275	26·24203	12·40590	18
19	2.20519	•45348	28·35732	12·85938	19
20	2.29891	•43499	30·56250	13·29437	20
21	2·39661	·41726	32·86141	13.71162	21
22	2·49847	·40025	35·25802	14.11187	22
23	2·60465	·38393	37·75648	14.49580	23
24	2·71535	·36828	40·36113	14.86407	24
25	2·83075	·35326	43·07648	15.21734	25
26	2·95106	•33886	45·90723	15•55620	26
27	3·07648	•32505	48·85829	15•88124	27
28	3·20723	•31180	51·93477	16·19304	28
29	3·34353	•29908	55·14199	16·49213	29
30	3·48564	•28689	58·48553	16·77902	30
31	3 63377	·27520	61·97116	17·05421	31
32	3·78821	·26398	65·60494	17·31819	32
33	3·94921	·25322	69·39315	17·57141	33
34	4·11705	·24289	73·34236	17·81430	34
35	4·29202	·23299	77·45941	18·04729	35
36	4*47444	•22349	81·75143	18·270 7 8	36
37	4*66460	•21438	86·22587	18·48516	37
38	4*86284	•20564	90·89047	18·69080	38
39	5*06952	•19726	95·75331	18·88806	39
40	5*28497	•18922	100·82283	19·07 7 27	40
41	5·50958	•18150	106·10780	19·25878	41
42	5·74374	•17410	111·61738	19·43288	42
43	5·98785	•16700	117·36112	19·59988	43
44	6·24233	•16020	123·34897	19·76008	44
45	6·50763	•15367	129·59130	19·91375	45
46	6·78420	•14740	136·09893	20·06115	46
47	7·07253	•14139	142·88313	20·20254	47
48	7·37312	•13563	149·95567	20·33817	48
49	7·68647	•13010	157·32878	20·46827	49
50	8·01315	•12479	165·01525	20·59306	50

	ONE	ONE POUND		PER ANNUM	Years	
Years	Amount	Present Value	Amount	Present Value	16315	
51	8·35371	·11971	173·02840	20·71277	51	
52	8·70874	·11483	181·38211	20·82760	52	
53	9·07886	•11015	190·09085	20·93774	53	
54	9·46471	·10566	199·16971	21·04340	54	
55	9·86696	·10135	208·63442	21·14475	55	
56	10·28631	•09722	218·50139	21·24196	56	
57	10·72348	•09325	228·78770	21·33522	57	
58	11·17922	•08945	239·51117	21·42467	58	
59	11·65434	•08580	250·69040	21·51047	59	
60	12·14965	•08231	262·34474	21·59278	60	
61	12.66601	•07895	274.49439	21.67173	61	
62	13.20432	•07573	287.16040	21.74746	62	
63	13.76550	•07265	300.36472	21.82011	63	
64	14.35053	•06968	314.13022	21.88979	64	
65	14.96043	•06684	328.48075	21.95664	65	
66	15·59625	•06412	343·44 ¹¹⁹	22·02075	66	
67	16·25909	•06150	359·03744	22·08226	67	
68	16·95010	•05900	375·29653	22·14125	68	
69	17·67048	•05659	392·24663	22·19785	69	
70	18·42148	•05428	409·91711	22·25213	70	
71	19·20439	•05207	428·33859	22·30420	71	
72	20·02058	•04995	447·54298	22·35415	72	
73	20·87145	•04791	467·56356	22·40206	73	
74	21·75849	•04596	488·43501	22·44802	74	
75	22·68322	•04409	510·19350	22·49211	75	
76	23.64726	•04229	532·87672	22·53440	76	
77	24.65227	•04056	556·52398	22·57496	77	
78	25.69999	•03891	581·17625	22·61387	78	
79	26.79224	•03732	606·87624	22·65119	79	
80	27.93091	•03580	633·66848	22·68700	80	
81	29·11797	•03434	661·59939	22·72134	81	
82	30·35549	•03294	690·71736	22·75428	82	
83	31·64560	•03160	721·07285	22·78588	83	
84	32·99053	•03031	752·71845	22·81619	84	
85	34·39263	•02908	785·70898	22·84527	85	
86	35.85432	•02789	820·10161	22.87316	86	
87	37.37813	•02675	855·95593	22.89991	87	
88	38.96670	•02566	893·33406	22.92558	88	
89	40.62278	•02462	932·30076	22.95019	89	
90	42.34925	•02361	972·92354	22.97381	90	
91	44·14909	•02265	1015·27279	22.99646	91	
92	46·02543	•02173	1059·42188	23.01819	92	
93	47·98151	•02084	1105·44731	23.03903	93	
94	50·02073	•01999	1153·42883	23.05902	94	
95	52·14661	•01918	1203·44955	23.07820	95	
96	54·36284	·01839	125 5 ·59616	23.09659	96	
97	56·67326	·01765	1309·95899	23.11424	97	
98	59·08187	·01693	1366·63225	23.13116	98	
99	61·59285	·01624	1425·71412	23.14740	99	
100	64·21055	·01557	1487·30697	23.16297	100	

Years	ONE	POUND	ONE POUND	ONE POUND PER ANNUM	
rears	Amount	Present Value	Amount	Present Value	Years
I	1.04500	.95694	1.00000	•95694	I
2	1.09203	.91573	° 2.04500	1.87267	2
3	1.14117	.87630	3.13705	2.74896	3
4	1.19252	.83856	4.27819	3.58753	4
5	1.24618	.80245	5.47071	4.38998	5
6	1.30226	.76790	6.71689	5.15787	6
7 8	1.36086	*73483	8.01912	5.89270	7
8	1.42210	.70319	9.38001	6.59589	8
9	1.48610	·67290	10.80211	7.26879	9
10	1.55297	.64393	12.58851	7.91272	10
II	1.62285	.61620	13.84118	8.52892	II
12	1.69588	•58966	15.46403	9.11828	12
13	1.77220	•56427	17.15991	9.68285	13
14	1.85194	*53997	18.93210	10.55583	14
15	1.93528	.21672	20.78405	10.73955	15
16	2.02237	·49447	22.71933	11.53401	16
17	2.11338	.47318	24.74170	11.70719	17
18	2.20848	'45280	26.85508	12.15999	18
19	2.30786	.43330	29.06356	12.59329	19
20	2.41171	'41464	31.37142	13.00794	20
21	2.52024	.39679	33.78314	13.40472	21
22	2.63365	37970	36.30338	13.78442	22
23	2.75217	'36335	38.93703	14.14777	23
24	2.87601	*34770	41.68919	14.49548	24
25	3.00543	'33273	44.56521	14.82821	25
26	3.14068	.31840	47.57064	15.14661	26
27	3.58501	*30469	50.71132	15.45130	27
28	3.42970	29157	53.99333	15.74287	28
29	3.58404	·2790I	57.42303	16.02189	29
30	3.74532	26700	61.00707	16.28889	30
31	3.91386	.25550	64.75238	16.54439	31
32	4.08998	*24450	68.66624	16.78889	32
33	4.27403	•23397	72.75622	17.02286	33
34	4.46636	.22390	77.03026	17.24676	34
35	4.66735	*21425	81 49662	17.46101	35
36	4.87738	.20503	86·16396	17.66604	36
37	5.09686	19620	91.04134	17.86224	37
37 38	5.32622	18775	96.13820	18.04999	38
39	5.56590	17967	101.46442	18.22966	39
40	5.81636	.17193	107.03032	18.40158	40
41	6.07810	•16453	112.84668	18.26611	41
42	6.35161	15744	118.92479	18.72355	42
43	6.63744	·15066	125.27640	18.87421	43
44	6.93612	14417	131.91384	19.01838	44
45	7.24825	.13796	138.84996	19.15635	45
46	7.57442	.13202	146.09821	19.28837	46
47	7.91527	12634	153.67263	19.41471	47
48	8.27145	12090	161.58790	19.53561	48
49	8.64367	11569	169.85935	19.65130	49
50	9.03264	11071	178.50303.	19.76201	50

Years	ONE I	POUND	ONE POUND	PER ANNUM	Years
Icais	Amount	Present Value	Amount	Present Value	Lears
51	9.43910	*10594	187·53566	19·86795	51
52	9.86386	*10138	196·97477	19·96933	52
53	10.30774	*09701	206·83863	20·06634	53
54	10.77159	*09284	217·14637	20·15918	54
55	11.25631	*08884	227·91796	20·24802	55
56	11.76284	*08501	239·17427	20·33303	56
57	12.29217	*08135	250·93711	20·41438	57
58	12.84532	*07785	263·22928	20·49224	58
59	13.42336	*07450	276·07459	20·566 7 3	59
60	14.02741	*07129	289·49795	20·63802	60
61	14.65864	*06822	303°52536	20·70624	61
62	15.31828	*06528	318°18400	20·77152	62
63	16.00760	*06247	333°50228	20·83399	63
64	16.72794	*05978	349°50988	20·89377	64
65	17.48070	*05721	366°23783	20·95098	65
66 67 68 69 70	18·26733 19·08936 19·94838 20·84606 21·78413	°05474 °05239 °05013 °04797 °04590	383·71853 401·98586 421·07523 441·02362 461·86968	21.00572 21.05811 21.15621 21.2621	66 67 68 69 70
71	22·76442	*04393	483.65381	21·24604	71
72	23·78882	*04204	506.41823	21·28808	72
73	24·85931	*04023	530.20706	21·32830	73
74	25·97798	*03849	555.06637	21·36680	74
75	27·14699	*03684	581.04436	21·40363	75
76	28·36861	*03525	608·19136	21.43888	76
77	29·64520	*03373	636·55997	21.47262	77
78	30·97923	*03228	666·20517	21.50490	78
79	32·37329	*03089	697·18440	21.53579	79
80	33·83009	*02956	729·55770	21.56534	80
81	35°35245	*02829	763·38779	21·59363	81
82	36°94331	*02707	798·74024	21·62070	82
83	38°60576	*02590	835·68355	21·64660	83
84	40°34302	*02479	874·28931	21·67139	84
85	42°15845	*02372	914·63233	21·69511	85
86	44.05558	°02270	956°79079	21.71781	86
87	46.03808	°02172	1000°84637	21.73953	87
88	48.10980	°02079	1046°88446	21.76032	88
89	50.27474	°01989	1094°99426	21.78021	89
90	52.53710	°01903	1145°26900	21.79924	90
91	54·90127	°01821	1197·80611	21·81746	91
92	57·37183	°01743	1252·70738	21·83489	92
93	59·95356	°01668	1310·07922	21·85156	93
94	62·65147	°01596	1370·03278	21·86753	94
95	65·47079	°01527	1432·68426	21·88280	95
96	68·41697	°01462	1498·15505	21·89742	96
97	71·49574	°01399	1566·57202	21·91140	97
98	74·71305	°01338	1638·06777	21·92479	98
99	78·07514	°01281	1712·78082	21·93760	99
100	81·58852	°01226	1790·85595	21·94985	100

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
Tears	Amount	Present Value	Amount	Present Value	
1	1.04750	•95465	1.00000	0.95465	1
2	1.09726	•91136	2.04750	1.86602	2
3	1.14938	•87004	3.14476	2.73606	3
4	1.20397	•83058	4.29413	3.56664	4
5	1.26116	•79292	5.49810	4.35956	5
6	1·32107	•75697	6·75926	5·11653	6
7	1·38382	•72264	8·08033	5·83917	7
8	1·44955	•68987	9·46414	6·52904	8
9	1·51840	•65859	10·91369	7·18762	9
10	1·59052	•62872	12·43209	7·81635	10
11	1.66607	•60021	14·02262	8·41656	11
12	1.74521	•57300	15·68869	8·98956	12
13	1.82811	•54701	17·43390	9·53657	13
14	1.91495	•52221	19·26201	10·05878	14
15	2.00591	•49853	21·17696	10·55731	15
16	2·10119	*47592	23·18286	11.03323	16
17	2·20099	*45434	25·28405	11.48757	17
18	2·30554	*43374	27·48504	11.92131	18
19	2·41505	*41407	29·79058	12.33538	19
20	2·52977	*39529	32·20563	12.73067	20
21	2·64993	*37737	34·73540	13·10804	21
22	2·77580	*36026	37·38533	13·46829	22
23	2·90765	*34392	40·16114	13·81221	23
24	3·04577	*32832	43·06879	14·14054	24
25	3·19044	*31344	46·11456	14·45397	25
26	3·34199	•29922	49·30500	14.75320	26
27	3·50073	•28565	52·64699	15.03885	27
28	3·66702	•27270	56·14772	15.31155	28
29	3·84120	•26034	59·81474	15.57189	29
30	4·02366	•24853	63·65594	15.82042	30
31	4·21478	•23726	67·67959	16·05768	31
32	4·41498	•22650	71·89437	16·28418	32
33	4·62469	•21623	76·30936	16·50041	33
34	4·84437	•20643	80·93405	16·70684	34
35	5·07447	•19706	85·77842	16·90390	35
36	5·31551	•18813	90·85289	17·09203	36
37	5·56800	•17960	96·16841	17·27163	37
38	5·83248	•17145	101·73641	17·44308	38
39	6·10952	•16368	107·56888	17·60676	39
40	6·39972	•15626	113·67841	17·76302	40
41	6·70371	•14917	120·07813	17·91219	41
42	7·02214	•14241	126·78184	18·05459	42
43	7·35569	•13595	133·80398	18·19054	43
44	7·70508	•12978	141·15967	18·32033	44
45	8·07108	•12390	148·86475	18·44423	45
46	8·45445	•11828	156·93583	18·56251	46
47	8·85604	•11292	165·39028	18·67543	47
48	9·27670	•10780	174·24632	18·78322	48
49	9·71734	•10291	183·52302	18·88613	49
50	10·17892	•09824	193·24036	18·98437	50

	ONE	ONE POUND		PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	lears
51	10.66242	*09379	203·41928	19·07816	51
52	11.16888	*08953	214·08170	19·16769	52
53	11.69940	*08547	225·25058	19·25317	53
54	12.25512	*08160	236·94998	19·33477	54
55	12.83724	*07790	249·20510	19·41267	55
56	13·44701	•07437	262·04234	19·48703	56
57	14·08574	•07099	275·48936	19·55803	57
58	14·75482	•06777	289·57510	19·62580	58
59	15·45567	•06470	304·32992	19·69050	59
60	16·18982	•06177	319·78559	19·75227	60
61	16·95883	•05897	335·97540	19·81124	61
62	17·76438	•05629	352·93424	19·86753	62
63	18·60818	•05374	370·69861	19·92127	63
64	19·49207	•05130	389·30680	19·97257	64
65	20·41795	•04898	408·79887	20·02155	65
66	21·38780	•04676	429·21681	20·06830	66
67	22·40372	•04464	450·60461	20·11294	67
68	23·46790	•04261	473·00833	20·15555	68
69	24·58262	•04068	496·47623	20·19623	69
70	25·75030	•03883	521·05885	20·23506	70
71	26·97343	•03707	546.80914	20·27214	71
72	28·25467	•03539	573.78258	20·30753	72
73	29·59677	•03379	602.03725	20·34132	73
74	31·00262	•03226	631.63402	20·37357	74
75	32·47524	•03079	662.63664	20·40436	75
76	34.01781	*02940	695·11188	20·43376	76
77	35.63366	*02806	729·12969	20·46182	77
78	37.32626	*02679	764·76335	20·48861	78
79	39.09926	*02558	802·08961	20·51419	79
80	40.95647	*02442	841·18887	20•53861	80
81	42·90190	•02331	882·14534	20·56192	81
82	44·93974	•02225	925·04724	20·58417	82
83	47·07438	•02124	969·98699	20·60541	83
84	49·31042	•02028	1017·06137	20·62569	84
85	51·65266	•01936	1066·37178	20·64505	85
86	54·10616	•01848	1118·02444	20.66353	86
87	56·67620	•01764	1172·13060	20.68118	87
88	59·36832	•01684	1228·80681	20.69802	88
89	62·18832	•01608	1288·17513	20.71410	89
90	65·14226	•01535	1350·36345	20.72945	90
91	68·23652	·01465	1415·50571	20-74411	91
92	71·47776	·01399	1483·74224	20-75810	92
93	74·87295	·01336	1555·21999	20-77145	93
94	78·42941	·01275	1630·09294	20-78420	94
95	82·15481	·01217	1708·52236	20-79638	95
96	86·05717	•01162	1790·67717	20·80800	96
97	90·14488	•01109	1876·73433	20·81909	97
98	94·42676	•01059	1966·87921	20·82968	98
99	98·91203	•01011	2061·30598	20·83979	99
100	103·61036	•00965	2160·21801	20·84944	100

Years	ONE POUND		ONE POUND PER ANNUM		Vanne	
	Amount	Present Value	Amount	Present Value	Years	
I	1.02000	.95238	I .00000	.95238	I	
2	1.10220	90703	2.05000	1.85941	2	
3	1.12463	.86384	3.15250	2.72325	3	
4	1.5121	82270	4.31013	3.54595	4	
5	1 .27628	78353	5.52563	4.32948	5	
6	1.34010	.74622	6.80191	5.07569	6	
7 8	1.40710	71068	8.14201	5.78637	7 8	
	1.47746	.67684	9.24911	6.46321	:	
9	1.55133	•64461	11.02656	7.10782	9	
10	1.62889	.61391	12.57789	7.72173	10	
II	1.71034	•58468	14.20679	8.30641	II	
12	1·79586 1·88565	.55684	15.91713	8.86325	12	
13		*53032	17.71298	9:39357	13	
14	1 ·97993 2 ·07893	·50507 ·48102	19.59863	9.89864	14	
15		1	21.57856	10.37966	15	
16	2.18282	.45811	23.65749	10.83777	16	
17	2.29202	·43630	25.84037	11.27407	17	
18	2.40662	41552	28.13238	11.68959	18	
19	2.52695	39573	30.23900	12.08532	19	
20	2.65330	*37689	33.06595	12.46221	20	
21	2.78596	*35894	35.71925	12.82115	21	
22	2.92526	*34185	38.50521	13.16300	22	
23	3.07152	*32557	41.43048	13.48857	23	
24	3.22510	'31007	44.50200	13.79864	24	
25	3.38632	*29530	47.72710	14.09394	25	
26	3.55567	*28124	51.11345	14.37518	26	
27	3.73346	*26785	54.66913	14.64303	27	
28	3.92013	*25509	58.40258	14.89813	28	
29	4.11614	*24295	62.32271	15.14107	29	
30	4.32194	23138	66.43885	15.37245	30	
31	4.53804	*22036	70.76079	15.59281	31	
32	4.76494	20987	75.29883	15.80268	32	
33	5.00319	19987	80.06377	16.00255	33	
34	5.25335 5.51602	18129	85.06696	16.19290	34	
35			90.32031	16.37419	35	
36	5.79182 6.08141	17266	95.83632	16.54685	36	
37	6.38548	16444	101.62814	16.71129	37	
38	6.70475	·15661 ·14915	107.70955	16.86789	38	
40	7.03999	14915	114.09502 120.79977	17.01704 17.15909	39 40	
4I 42	7.39199	·13528 ·12884	127.83976	17.29437	41	
43	7.76159 8.14967	12004	135.23175	17:42321	42	
44	8.55715	11686	151.14301	17·54591 17·66277	43	
45	8.98501	.11130	159.70016	17.77407	44	
46	9.43426	.10600	168.68516	17.88007	46	
47	9.90597	. 10095	178.11942	17.98101	47	
48	10.40127	*09614	188.02539	18.07716	48	
49	10.92133	*09156	198.42666	18.16872	49	
	11.46740	.08720	209:34800	18.25592	- イブ	

Years	ONE 1	POUND	ONE POUND	PER ANNUM	Years
Tears	Amount	Present Value	Amount	Present Value	Tears
51	12.04077	*08305	220·81540	18·33898	51
52	12.64281	*07910	232·85617	18·41807	52
53	13.27495	*07533	245·49897	18·49340	53
54	13.93870	*07174	258·77392	18·56514	54
55	14.63563	*06833	272·71262	18·63347	55
56	15·36741	•06507	287·34825	18·69854	56
57	16·13578	•06197	302·71566	18·76052	57
58	16·94257	•05902	318·85144	18·81954	58
59	17·78970	•05621	335·79402	18·87575	59
60	18·67919	•05354	353·58372	18·92929	60
61	19·61315	•05099	372·26290	18·98027	61
62	20·59380	•04856	391·87605	19·02883	62
63	21·62349	•04625	412·46985	19·07508	63
64	22·70467	•04404	434·09334	19·11912	64
65	23·83990	•04195	456·79801	19·16107	65
66	25.03190	•03995	480·63791	19·20102	66
67	26.28349	•03805	505·66981	19·23907	67
68	27.59766	•03623	531·95330	19·27530	68
69	28.97755	•03451	559·55096	19·30981	69
70	30.42643	•03287	588·52851	19·34268	70
71	31 '94775	*03130	618·95494	19·37398	71
72	33 '54513	*02981	650·90268	19·40379	72
73	35 '22239	*02839	684·44782	19·43218	73
74	36 '98351	*02704	719·67021	19·45922	74
75	38 '83269	*02575	756·65372	19·48497	75
76	40·77432	*02453	795.48640	19·50949	76
77	42·81304	*02336	836.26072	19·53285	77
78	44·95369	*02225	879.07376	19·55510	78
79	47·20137	*02119	924.02745	19·57628	79
80	49·56144	*02018	971.22882	19·59646	80
81	52°03951	*01922	1020·79026	19·61568	81
82	54°64149	*01830	1072·82978	19·63398	82
83	57°37356	*01743	1127·47126	19·65141	83
84	60°24224	*01660	1184·84483	19·66801	84
85	63°25435	*01581	1245·08707	19·68382	85
86	66·41707	*01506	1308·34142	19.69887	86
87	69·73792	*01434	1374·75849	19.71321	87
88	73·22482	*01366	1444·49642	19.72687	88
89	76·88606	*01301	1517·72124	19.73987	89
90	80·73037	*01239	1594·60730	19.75226	90
91	84·76688	*01180	1675·33767	19·76406	91
92	89·00523	*01124	1760·10455	19·77529	92
93	93·45549	*01070	1849·10978	19·78599	93
94	98·12826	*01019	1942·56527	19·79618	94
95	103·03468	*00971	2040·69353	19·80589	95
96	108·18641	*00924	2143·72821	19·81513	96
97	113·59573	*00880	2251·91462	19·82394	97
98	119·27552	*00838	2365·51035	19·83232	98
99	125·23929	*00798	2484·78586	19·84030	99
100	131·50126	*00760	2610·02516	19·84791	100

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
Tears	Amount	Present Value	Amount	Present Value	lears
1	1.05500	°94787	1.00000	0·94787	1
2	1.11303	·89845	2.05500	1·84632	2
3	1.17424	·85161	3.16803	2·69793	3
4	1.23882	·80722	4.34227	3·50515	4
5	1.30696	·76513	5.58109	4·27028	5
6	1·37884	·72525	6.88805	4·99553	6
7	1·45468	·68744	8.26689	5·68297	7
8	1·53469	·65160	9.72157	6·33457	8
9	1·61909	·61763	11.25626	6·95220	9
10	1·70814	·58543	12.87535	7·53763	10
11	1.80209	·55491	14·58350	8·09254	11
12	1.90121	·52598	16·38559	8·61852	12
13	2.00577	·49856	18·28680	9·11708	13
14	2.11609	·47257	20·29257	9·58965	14
15	2.23248	·44793	22·40866	10·03758	15
16	2·35526	·42458	24.64114	10·46216	16
17	2·48480	·40245	26.99640	10·86461	17
18	2·62147	·38147	29.48120	11·24607	18
19	2·76565	·36158	32.10267	11·60765	19
20	2·91776	·34273	34.86832	11·95038	20
21	3.07823	·32486	37·78608	12·27524	21
22	3.24754	·30793	40·86431	12·58317	22
23	3.42615	·29187	44·11185	12·87504	23
24	3.61459	·27666	47·53800	13·15170	24
25	3.81339	·26223	51·15259	13·41393	25
26	4.02313	•24856	54·96598	13.66250	26
27	4.24440	•23560	58·98911	13.89810	27
28	4.47784	•22332	63·23351	14.12142	28
29	4.72412	•21168	67·71135	14.33310	29
30	4.98395	•20064	72·43548	14.53375	30
31	5·25807	•19018	77·41943	14·72393	31
32	5·54726	•18027	82·67750	14·90420	32
33	5·85236	•17087	88·22476	15·07507	33
34	6·17424	•16196	94·07712	15·23703	34
35	6·51383	•15352	100•25136	15·39055	35
36	6·87209	*14552	106·76519	15·53607	36
37	7·25005	*13793	113·63727	15·67400	37
38	7·64880	*13074	120·88732	15·80474	38
39	8·06949	*12392	128·53613	15·92866	39
40	8·51331	*11746	136·60561	16·04612	40
41	8·98154	•11134	145·11892	16·15746	41
42	9·47553	•10554	154·10046	16·26300	42
43	9·99668	•10003	163·57599	16·36303	43
44	10·54650	•09482	173·57267	16·45785	44
45	11·12655	•08988	184·11917	16·54773	45
46	11.73851	•08519	195·24572	16·63292	46
47	12.38413	•08075	206·98423	16·71366	47
48	13.06526	•07654	219·36837	16·79020	48
49	13.78385	•07255	232·43363	16·86275	49
50	14.54196	•06877	246·21748	16·93152	50

For explanations see pp. (8-14). (140)

77	ONE	POUND	ONE POUND	PER ANNUM	3-
Years	Amount	Present Value	Amount	Present Value	Years
51	15·34177	•06518	260·75944	16·99670	51
52	16·18557	•06178	276·10121	17·05848	52
53	17·07577	•05856	292·28677	17·11705	53
54	18·01494	•05551	309·36255	17·17255	54
55	19·00576	•05262	327·37749	17·22517	55
56	20·05108	•04987	346·38325	17·27504	56
57	21·15389	•04727	366·43433	17·32232	57
58	22·31735	•04481	387·58821	17·36712	58
59	23·54481	•04247	409·90557	17·40960	59
60	24·83977	•04026	433·45037	17·44985	60
61	26·20596	·03816	458·29014	17·48801	61
62	27·64729	·03617	484·49610	17·52418	62
63	29·16789	·03428	512·14339	17·55847	63
64	30·77212	·03250	541·31127	17·59096	64
65	32·46459	·03080	572·08339	17·62177	65
66	34·25014	·02920	604·54798	17·65096	66
67	36·13390	·02767	638·79812	17·67864	67
68	38·12126	·02623	674·93201	17·70487	68
69	40·21793	·02486	713·05327	17·72974	69
70	42·42992	·02357	753·27120	17·75330	70
71	44.76356	·02234	795.70112	17·77564	71
72	47.22556	·02117	840.46468	17·79682	72
73	49.82296	·02007	887.69024	17·81689	73
74	52.56323	·01902	937.51320	17·83591	74
75	55.45420	·01803	990.07643	17·85395	75
76	58.50418	·01709	1045·53063	17·87104	76
77	61.72191	·01620	1104·03482	17·88724	77
78	65.11662	·01536	1165·75673	17·90260	78
79	68.69803	·01456	1230·87335	17·91716	79
80	72.47643	·01380	1299·57139	17·93095	80
81	76·46263	·01308	1372·04781	17·94403	81
82	80·66807	·01240	1448·51044	17·95643	82
83	85·10482	·01175	1529·17852	17·96818	83
84	89·78558	·01114	1614·28334	17·97932	84
85	94·72379	·01056	1704·06892	17·98987	85
86	99·93360	•01001	1798·79271	17·99988	86
87	105·42995	•00948	1898·72631	18·00936	87
88	111·22859	•00899	2004·15626	18·01835	88
89	117·34617	•00852	2115·38485	18·02688	89
90	123·80021	•00808	2232·73102	18·03495	90
91	130·60922	*00766	2356·53122	18·04261	91
92	137·79272	*00726	2487·14044	18·04987	92
93	145·37132	*00688	2624·93316	18·05675	93
94	153·36675	*00652	2770·30449	18·06327	94
95	161·80192	*00618	2923·67123	18·06945	95
96	170·70102	·00586	3085:47315	18·07531	96
97	180·08958	·00555	3256:17418	18·08086	97
98	189·99451	·00526	3436:26376	18·08612	98
99	200·44420	·00499	3626:25826	18·09111	99
100	211·46864	·00473	3826:70247	18·09584	100

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
	Amount	Present Value	Amount	Present Value	
1	1.06000	*94340	1.00000	°94340	1
2	1.12360	*89000	2.06000	1°83339	2
3	1.19102	*83962	3.18360	2°67301	3
4	1.26248	*79209	4.37462	3°46511	4
5	1.33823	*74726	5.63709	4°21236	5
6 7 8 9	1·41852 1·50363 1·59385 1·68948 1·79085	•70496 •66506 •62741 •59190 •55839	6·97532 8·39384 9·89747 11·49132 13·18079	4.91732 5.58238 6.20979 6.80169 7.36009	6 7 8 9
11	1.89830	*52679	14·97164	7·88687	11
12	2.01220	*49697	16·86994	8·38384	12
13	2.13293	*46884	18·88214	8·85268	13
14	2.26090	*44230	21·01507	9·29498	14
15	2.39656	*41727	23·27597	9·71225	15
16	2·54035	*39365	25.67253	10·10590	16
17	2·69277	*37136	28.21288	10·47726	17
18	2·85434	*35034	30.90565	10·82760	18
19	3·02560	*33051	33.75999	11·15812	19
20	3·20714	*31180	36.78559	11·46992	20
21	3°39956	*29416	39 ⁹ 9273	11·76408	21
22	3°60354	*27751	43 ³ 9229	12·04158	22
23	3°81975	*26180	46 ⁹ 9583	12·30338	23
24	4°04893	*24698	50 ⁸ 1558	12·55036	24
25	4°29187	*23300	54 ⁸ 6451	12·78336	25
26	4°54938	*21981	59·15638	13.00317	26
27	4°82235	*20737	63·70577	13.21053	27
28	5°11169	*19563	68·52811	13.40616	28
29	5°41839	*18456	73·63980	13.59072	29
30	5°74349	*17411	79·05819	13.76483	30
31	6.08810	*16425	84·80168	13·92909	31
32	6.45339	*15496	90·88978	14·08404	32
33	6.84059	*14619	97·34316	14·23023	33
34	7.25103	*13791	104·18375	14·36814	34
35	7.68609	*13011	111·43478	14·49825	35
36	8·14725	11274	119·12087	14·62099	36
37	8·63609	11579	127·26812	14·73678	37
38	9·15425	10924	135·90421	14·84602	38
39	9·70351	10306	145·05846	14·94907	39
40	10·28572	09722	154·76197	15·04630	40
41	10·90286	°09172	165.04768	15·13802	41
42	11·55703	°08653	175.95054	15·22454	42
43	12·25045	°08163	187.50758	15·30617	43
44	12·98548	°07701	199.75803	15·38318	44
45	13·76461	°07265	212.74351	15·45583	45
46	14·59049	°06854	226·50812	15·52437	46
47	15·46592	°06466	241·09861	15·58903	47
48	16·39387	°06100	256·56453	15·65003	48
49	17·37750	°05755	272·95841	15·70757	49
50	18·42015	°05429	290·33590	15·76186	50

Years	ONE POUND		ONE POUND PER ANNUM		
1 cars	Amount	Present Value	Amount	Present Value	Years
51	19·52536	°05122	308·75606	15.81308	51
52	20·69689	°04832	328·28142	15.86139	52
53	21·93870	°04558	348·97831	15.90697	53
54	23·25502	°04300	370·91701	15.94998	54
55	24·65032	°04057	394·17203	15.99054	55
56	26·12934	°03827	418·82235	16·02881	56
57	27·69710	°03610	444·95169	16·06492	57
58	29·35893	°03406	472·64879	16·09898	58
59	31·12046	°03213	502·00772	16·13111	59
60	32·98769	°03031	533·12818	16·16143	60
61	34.96695	*02860	566·11587	16·19003	61
62	37.06497	*02698	601·08282	16·21701	62
63	39.28887	*02545	638·14779	16·24246	63
64	41.64620	*02401	677·43666	16·26647	64
65	44.14497	*02265	719·08286	16·28912	65
66	46°79367	*02137	763·22783	16·31049	66
67	49°60129	*02016	810·02150	16·33065	67
68	52°57737	*01902	859·62279	16·34967	68
69	55°73201	*01794	912·20016	16·36792	69
70	59°07593	*01693	967·93217	16·38454	70
71	62·62049	*01597	1027·00810	16·40051	71
72	66·37772	*01507	1089·62859	16·41158	72
73	70·36038	*01421	1156·00630	16·42979	73
74	74·58200	*01341	1226·36668	16·44320	74
75	79·05692	*01265	1300·94868	16·45585	75
76	83*80034	*01193	1380·00560	16·46778	76
77	88*82836	*01126	1463·80594	16·47904	77
78	94*15806	*01062	1552·63429	16·48966	78
79	99*80754	*01002	1646·79235	16·49968	79
80	105*79599	*00945	1746·59989	16·50913	80
81	112·14375	*00892	1852·39588	16·51805	81
82	118·87238	*00841	1964·53964	16·52646	82
83	126·00472	*00794	2083·41202	16·53440	83
84	133·56500	*00749	2209·41674	16·54188	84
85	141·57890	*00706	2342·98174	16·54895	85
86	150·07364	00666	2484·56065	16·55561	86
87	159·07806	00629	2634·63428	16·56190	87
88	168·72274	00593	2793·71234	16·56783	88
89	178·74010	00559	2962·33508	16·57342	89
90	189·46451	00528	3141·07519	16·57870	90
91	200·83238	00498	3330·53970	16·58368	91
92	212·88232	00470	3531·37208	16·58838	92
93	225·65526	00443	3744·25441	16·59281	93
94	239·19458	00418	3969·90967	16·59699	94
95	253·54625	00394	4209·10425	16·60093	95
96 97 98 99 100	268·75903 284·88457 301·97765 320·09631 339·30208	'00372 '00351 '00331 '00312 '00295	4462·65050 4731·40953 5016·29411 5318·27175 5638·36806	16·60465 16·60816 16·61147 16·61460 16·61755	96 97 98 99

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
lears	Amount	Present Value	Amount	Present Value	1 Cars
1	1.06500	·93897	1.00000	0·93897	1
2	1.13423	·88166	2.06500	1·82063	2
3	1.20795	·82785	3.19923	2·64848	3
4	1.28647	·77732	4.40717	3·42580	4
5	1.37009	·72988	5.69364	4·15568	5
6	1·45914	•68533	7·06373	4·84101	6
7	1·55399	•64351	8·52287	5·48452	7
8	1·65500	•60423	10·07686	6·08875	8
9	1·76257	•56735	11·73185	6·65610	9
10	1·87714	•53273	13·49442	7·18883	10
11	1·99915	•50021	15·37156	7.68904	11
12	2·12910	•46968	17·37071	8.15873	12
13	2·26749	•44102	19·49981	8.59974	13
14	2·41487	•41410	21·76730	9.01384	14
15	2·57184	•38883	24·18217	9.40267	15
16	2·73901	·36510	26·75401	9·76776	16
17	2·91705	·34281	29·49302	10·11058	17
18	3·10665	·32189	32·41007	10·43247	18
19	3·30859	·30224	35·51672	10·73471	19
20	3·52365	·28380	38·82531	11·01851	20
21	3·75268	·26648	42·34895	11·28498	21
22	3·99661	·25021	46·10164	11·53520	22
23	4·25639	·23494	50·09824	11·77014	23
24	4·53305	·22060	54·35463	11·99074	24
25	4·82770	·20714	58·88768	12·19788	25
26	5·14150	•19450	63·71538	12·39237	26
27	5·47570	•18263	68·85688	12·57500	27
28	5·83162	•17148	74·33257	12·74648	28
29	6·21067	•16101	80·16419	12·90749	29
30	6·61437	•15119	86·37486	13·05868	30
31	7·04430	•14196	92·98923	13·20063	31
32	7·50218	•13329	100·03353	13·33393	32
33	7·98982	•12516	107·53571	13·45909	33
34	8·50916	•11752	115·52553	13·57661	34
35	9·06225	•11035	124·03469	13·68696	35
36	9·65130	•10361	133·09695	13·79057	36
37	10·27864	•09729	142·74825	13·88786	37
38	10·94675	•09135	153·02688	13·97921	38
39	11·65829	•08578	163·97363	14·06499	39
40	12·41607	•08054	175·63192	14·14553	40
41	13·22312	•07563	188·04799	14·22115	41
42	14·08262	•07101	201·27111	14·29216	42
43	14·99799	•06668	215·35373	14·35884	43
44	15·97286	•06261	230·35172	14·42144	44
45	17·01110	•05879	246·32459	14·48023	45
46	18·11682	•05520	263·33568	14·53543	46
47	19·29441	•05183	281·45250	14·58725	47
48	20·54855	•04867	300·74692	14·63592	48
49	21·88421	•04570	321·29547	14·68161	49
50	23·30668	•04291	343·17967	14·72452	50

Years	ONE	POUND	ONE POUND	PER ANNUM	
Years	Amount	Present Value	Amount	Present Value	Years
51	24·82161	*04029	366·48635	14·76481	51
52	26·43502	*03783	391·30796	14·80264	52
53	28·15329	*03552	417·74298	14·83816	53
54	29·98326	*03335	445·89627	14·87151	54
55	31·93217	*03132	475·87953	14·90282	55
56	34·00776	·02941	507.81170	14·93223	56
57	36·21827	·02761	541.81946	14·95984	57
58	38·57245	·02593	578.03773	14·98577	58
59	41·07966	·02434	616.61018	15·01011	59
60	43·74984	·02286	657.68984	15·03297	60
61	46·59358	•02146	701·43968	15.05443	61
62	49·62216	•02015	748·03326	15.07458	62
63	52·84760	•01892	797·65542	15.09350	63
64	56·28270	•01777	850·50303	15.11127	64
65	59·94107	•01668	906·78572	15.12795	65
66	63·83724	•01566	966·72679	15·14362	66
67	67·98666	•01471	1030·56404	15·15833	67
68	72·40580	•01381	1098·55070	15·17214	68
69	77·11217	•01297	1170·95649	15·18511	69
70	82·12446	•01218	1248·06867	15·19728	70
71	87·46255	•01143	1330·19313	15·20872	71
72	93·14762	•01074	1417·65568	15·21945	72
73	99·20221	•01008	1510·80330	15·22953	73
74	105·65036	•00947	1610·00552	15·23900	74
75	112·51763	•00889	1715·65587	15·24788	75
76	119·83128	•00835	1828·17351	15·25623	76
77	127·62031	•00784	1948·00478	15·26407	77
78	135·91563	•00736	2075·62510	15·27142	78
79	144·75015	•00691	2211·54073	15·27833	79
80	154·15891	•00649	2356·29087	15·28482	80
81	164·17924	•00609	2510·44978	15·29091	81
82	174·85089	•00572	2674·62902	15·29663	82
83	186·21619	•00537	2849·47990	15·30200	83
84	198·32025	•00504	3035·69610	15·30704	84
85	211·21106	•00473	3234·01634	15·31178	85
86	224·93978	•00445	3445·22741	15·31622	86
87	239·56087	•00417	3670·16719	15·32040	87
88	255·13232	•00392	3909·72805	15·32431	88
89	271·71592	•00368	4164·86038	15·32800	89
90	289·37746	•00346	4436·57630	15·33145	90
91	308·18699	•00324	4725.95376	15·33470	91
92	328·21915	•00305	5034.14076	15·33774	92
93	349·55339	•00286	5362.35990	15·34060	93
94	372·27436	•00269	5711.91330	15·34329	94
95	396·47220	•00252	6084.18766	15·34581	95
96	422·24289	*00237	6480.65986	15·34818	96
97	449·68868	*00222	6902.90275	15·35040	97
98	478·91844	*00209	7352.59143	15·35249	98
99	510·04814	*00196	7831.50987	15·3544 5	99
100	543·20127	*00184	8341.55802	15·35629	100

Years	ONE PO	DUND	ONE POUND	PER ANNUM	Years
10015	Amount	Present Value	Amount	Present Value	20025
1	1.07000	*93458	1 ·00000	93458	1
2	1.14490	*87344	2 ·07000	1.80802	2
3	1.22504	*81630	3 ·21490	2.62432	3
4	1.31080	*76290	4 ·43994	3.38721	4
5	1.40255	*71299	5 ·75074	4.10020	5
6 7 8 9	1·50073 1·60578 1·71819 1·83846 1·96715	•66634 •62275 •58201 •54393 •50835	7·15329 8·65402 10·25980 11·97799 13·81645	4.76654 5.38929 5.97130 6.51523 7.02358	6 7 8 9
11	2·10485	*47509	15.78360	7·49867	11
12	2·25219	*44401	17.88845	7·94269	12
13	2·40985	*41496	20.14064	8·35765	13
14	2·57853	*38782	22.55049	8·74547	14
15	2·75903	*36245	25.12902	9·10791	15
16	2·95216	*33873	27.88805	9·44665	16
17	3·15882	*31657	30.84022	9·76322	17
18	3·37993	*29586	33.99903	10·05909	18
19	3·61653	*27651	37.37896	10·33560	19
20	3·86968	*25842	40.99549	10·59401	20
21	4·14056	*24151	44.86518	10·83553	21
22	4·43040	*22571	49.00574	11·06124	22
23	4·74053	*21095	53.43614	11·27219	23
24	5·07237	*19715	58.17667	11·46933	24
25	5·42743	*18425	63.24904	11·65358	25
26	5.80735	·17220	68·67647	11.82578	26
27	6.21387	·16093	74·48382	11.98671	27
28	6.64884	·15040	80·69769	12.13711	28
29	7.11426	·14056	87·34653	12.27767	29
30	7.61226	·13137	94·46079	12.40904	30
31	8·14511	·12277	102.07304	12·53181	31
32	8·71527	·11474	110.21815	12·64656	32
33	9·32534	·10723	118.93343	12·75379	33
34	9·97811	·10022	128.25876	12·85401	34
35	10·67658	·09366	138.23688	12·94767	35
36	11·42394	*08754	148.91346	13°03521	36
37	12·22362	*08181	160.33740	13°11702	37
38	13·07927	*07646	172.56102	13°19347	38
39	13·99482	*07146	185.64029	13°26493	39
40	14·97446	*06678	199.63511	13°33171	40
41	16·02267	*06241	214·60957	13·39412	41
42	17·14426	*05833	230·63224	13·45245	42
43	18·34435	*05451	247·77650	13·55696	43
44	19·62846	*05095	266·12085	13·55791	44
45	21·00245	*04761	285·74931	13·60552	45
46	22.47262	*04450	306·75176	13.65002	46
47	24.04571	*04159	329·22439	13.69161	47
48	25.72891	*03887	353·27009	13.73047	48
49	27.52993	*03632	378·99900	13.76680	49
50	29.45703	*03395	406·52893	13.80075	50

Years	ONE 1	COUND	ONE POUND P	ER ANNUM	Vacar	
Tears	Amount	Present Value	Amount	Present Value	Years	
51	31.51902	*03173	435.98595	13.83247	51	
52	33.72535	*02965	467.50497	13.86212	52	
53	36.08612	*02771	501.23032	13.88984	53	
54	38.61215	*02590	537.31644	13.91573	54	
55	41.31500	*02420	575.92859	13.93994	55	
56 57 58 59 60	44 20705 47 30155 50 61265 54 15554 57 94644	*02262 *02114 *01976 *01847 *01726	617·24359 661·45065 708·75219 759·36484 813·52038	13.96256 13.98370 14.00346 14.02192 14.03918	56 57 58 59	
61	62·00267	*01613	871·46681	14°05531	61	
62	66·34286	*01507	933·46949	14°07038	62	
63	70·98686	*01409	999·81235	14°08447	63	
64	75·95594	*01317	1070·79922	14°09764	64	
65	81·27285	*01230	1146·75516	14°10994	65	
66	86·96195	*01150	1228·02802	14·12144	66	
67	93·04929	*01075	1314·98998	14·13219	67	
68	99·56274	*01004	1408·03928	14·14223	68	
69	106·53213	*00939	1507·60203	14·15162	69	
70	113·98938	*00877	1614·13417	14·16039	70	
71	121 [,] 96864	*00820	1728·12357	14·16859	71	
72	130 [,] 50644	*00766	1850·09222	14·17625	72	
73	139 [,] 64189	*00716	1980·59867	14·18341	73	
74	149 [,] 41682	*00669	2120·24058	14·19010	74	
75	159 [,] 87600	*00625	2269·65742	14·19636	75	
76	171°06732	*00585	2429·53344	14·20220	76	
77	183°04203	*00546	2600·60078	14·20767	77	
78	195°85498	*00511	2783·64283	14·21277	78	
79	209°56483	*00477	2979·49783	14·21755	79	
80	224°23437	*00446	3189·06268	14·22201	80	
81	239·93077	*00417	3413·29707	14·22617	81	
82	256·72592	*00390	3653·22786	14·23007	82	
83	274·69674	*00364	3909·95381	14·23371	83	
84	293·92551	*00340	4184·65058	14·23711	84	
85	314·50029	*00318	4478·57612	14·24029	85	
86	336·51531	*00297	4793.07645	14·24326	86	
87	360·07139	*00278	5129.59180	14·24604	87	
88	385·27638	*00260	5489.66323	14·24863	88	
89	412·24573	*00243	5874.93965	14·25106	89	
90	441·10293	*00227	6287.18543	14·25333	90	
91	471.98014	*00212	6728·28841	14·25545	91	
92	505.01875	*00198	7200·26859	14·25743	92	
93	540.37006	*00185	7705·28740	14·25928	93	
94	578.19596	*00173	8245·65751	14·26101	94	
95	618.66968	*00162	8823·85354	14·26262	95	
96 97 98 99	661·97656 708·31492 757·89696 810·94975 867·71623	*00151 *00141 *00132 *00123	9442·52329 10104·49992 10812·81491 11570·71196 12381·66179	14·26413 14·26555 14·26686 14·26810 14·26925	96 97 98 99	

Years	ONE	POUND	ONE POUND	PER ANNUM	Years
rears	Amount	Present Value	Amount	Present Value	lears
1	1.07500	•93023	1 ·00000	0·93023	1
2	1.15563	•86533	2 ·07 500	1·79557	2
3	1.24230	•80496	3 ·23063	2·60053	3
4	1.33547	•74880	4 ·47 292	3·34933	4
5	1.43563	•69656	5 ·80839	4·04588	5
6	1.54330	•64796	7·24402	4.69385	6
7	1.65905	•60275	8·78732	5.29660	7
8	1.78348	•56070	10·44637	5.85730	8
9	1.91724	•52158	12·22985	6.37889	9
10	2.06103	•48519	14·14709	6.86408	10
11	2·21561	·45134	16·20812	7·31542	11
12	2·38178	·41985	18·42373	7·73528	12
13	2·56041	·39056	20·80551	8·12584	13
14	2·75244	·36331	23·36592	8·48915	14
15	2·95888	·33797	26·11836	8·82712	15
16	3·18079	·31439	29·07724	9·14151	16
17	3·41935	·29245	32·25804	9·43396	17
18	3·67580	·27205	35·67739	9·70601	18
19	3·95149	·25307	39·35319	9·95908	19
20	4·24785	·23541	43·30468	10·19449	20
21	4·56644	•21899	47·55253	10·41348	21
22	4·90892	•20371	52·11897	10·61719	22
23	5·27709	•18950	57·02790	10·80669	23
24	5·67287	•17628	62·30499	10·98297	24
25	6·09834	•16398	67·97786	11·14695	25
26	6·55572	•15254	74·07620	11·29948	26
27	7·04739	•14190	80·63192	11·44138	27
28	7·57595	•13200	87·67931	11·57338	28
29	8·14414	•12279	95·25526	11·69617	29
30	8·75496	•11422	103·39940	11·81039	30
31	9·41158	•10625	112·15436	11·91664	31
32	10·11745	•09884	121·56593	12·01548	32
33	10·87625	•09194	131·68338	12·10742	33
34	11·69197	•08553	142·55963	12·19295	34
35	12·56887	•07956	154·25161	12·27251	35
36	13·51154	•07401	166·82048	12·34652	36
37	14·52490	•06885	180·33201	12·41537	37
38	15·61427	•06404	194·85691	12·47941	38
39	16·78534	•05958	210·47118	12·53899	39
40	18·04424	•05542	227·25652	12·59441	40
41	19·39756	·05155	245·30076	12·64596	41
42	20·85237	·04796	264·69832	12·69392	42
43	22·41630	·04461	285·55069	12·73853	43
44	24·09752	·04150	307·96699	12·78003	44
45	25·90484	·03860	332·06452	12·81863	45
46	27.84770	•03591	357·96935	12·85454	46
47	29.93628	•03340	385·81706	12·88794	47
48	32.18150	•03107	415·75333	12·91902	48
49	34.59511	•02891	447·93483	12·94792	49
50	37.18975	•02689	482·52995	12·97481	50

Yearn	ONE I	POUND	ONE POUND	PER ANNUM	
Years	Amount	Present Value	Amount	Present Value	Years
51	39·97898	*02501	519·71969	12·99982	51
52	42·97740	*02327	559·69867	13·02309	52
53	46·20071	*02164	602·67607	13·04474	53
54	49·66576	*02013	648·87678	13·06487	54
55	53·39069	*01873	698·54253	13·08360	55
56	57·39499	•01742	751.93322	13·10103	56
57	61·69962	•01621	809.32822	13·11723	57
58	66·32709	•01508	871.02783	13·13231	58
59	71·30162	•01402	937.35492	13·14633	59
60	76·64924	•01305	1008.65654	13·15938	60
61	82·39793	*01214	1085·30578	13·17152	61
62	88·57778	*01129	1167·70371	13·18281	62
63	95·22111	*01050	1256·28149	13·19331	63
64	102·36270	*00977	1351·50260	13·20308	64
65	110·03990	*00909	1453·86530	13·21217	65
66	118·29289	*00845	1563·90519	13·22062	66
67	127·16486	*00786	1682·19808	13·22848	67
68	136·70222	*00732	1809·36294	13·23580	68
69	146·95489	*00680	1946·06516	13·24260	69
70	157·97650	*00633	2093·02005	13·24893	70
71	169·82474	•00589	2250·99655	13·25482	71
72	182·56160	•00548	2420·82129	13·26030	72
73	196·25372	•00510	2603·38289	13·26539	73
74	210·97275	•00474	2799·63661	13·27013	74
75	226·79570	•00441	3010·60935	13·27454	75
76	243.80538	.00410	3237·40505	13·27864	76
77	262.09078	.00382	3481·21043	13·28246	77
78	281.74759	.00355	3743·30122	13·28601	78
79	302.87866	.00330	4025·04881	13·28931	79
80	325.59456	.00307	4327·92747	13·29238	80
81	350·01415	•00286	4653·52203	13·29524	81
82	376·26521	•00266	5003·53618	13·29790	82
83	404·48510	•00247	5379·80139	13·30037	83
84	434·82149	•00230	5784·28650	13·30267	84
85	467·43310	•00214	6219·10798	13·30481	85
86	502·49058	*00199	6686·54108	13·30680	86
87	540·17737	*00185	7189·03166	13·30865	87
88	580·69068	*00172	7729·20904	13·31037	88
89	624·24248	*00160	8309·89972	13·31197	89
90	671 06066	*00149	8934·14220	13·31346	90
91	721·39021	*00139	9605·20286	13·31485	91
92	775·49448	*00129	10326·59307	13·31614	92
93	833·65657	*00120	11102·08755	13·31734	93
94	896·18081	*00112	11935·74412	13·31846	94
95	963·39437	*00104	12831·92493	13·31949	95
96	1035·64895	*00097	13795·31930	13·32046	96
97	1113·32262	*00090	14830·96825	13·32136	97
98	1196·82181	*00084	15944·29087	13·32219	98
99	1286·58345	*00078	17141·11268	13·32297	99
100	1383·07721	*00072	18427·69613	13·32369	100

Years	ONE P	OUND	ONE POUND	ONE POUND PER ANNUM	
rears	Amount	Present Value	Amount	Present Value	Year
I	1.08000	92593	1.00000	.92593	1
2	1.16640	*85734	2.08000	1.78326	2
3	1.25971	.79383	3.24640	2.57710	3
4	1.36049	:73503	4.20611	3.31213	4
4 5	1.46933	•68058	5.86660	3.99271	5
6	1.58687	•63017	7:33593	4.62288	6
7	1.71382	•58349	8.92280	5.20637	7 8
7 8	1.85093	*54027	10.63663	5.74664	8
9	1.99900	*50025	12.48756	6.24689	9
IO	2.15892	•46319	14.48656	6.71008	10
II	2.33164	•42888	16.64549	7.13896	11
12	2.51817	*39711	18.97713	7.53608	12
13	2.71962	*36770	21.49530	7.90378	13
14	2.93719	*34046	24.21492	8.24424	14
45	3.17217	*31524	27.15211	8.55948	15
16	3.42594	•29189	30.32428	8.85137	16
17	3.70002	*27027	33.75023	9.12164	17
18	3.99602	*25025	37.45024	9.37189	18
19	4.31570	*23171	41.44626	9.60360	19
20	4.66096	*21455	45.76196	9.81815	20
21	5.03383	•19866	50.42292	10.01680	21
22	5.43654	•18394	55°45676 60°89330	10.20074	22
23	5.87146	•17032		10.37106	23
24	6.34118	.15770	66.76476	10.52876	24
25	6.84848	•14602	73.10594	10.67478	25
26	7.39635	•13520	79.95442	10.80998	26
27	7.98806	.12519	87.35077	10.93516	27
28	8.62711	.11591	95.33883	11.05108	28
29	9.31727	.10733	103.96593	11.12841	29
30	10.06266	•09938	113.58351	11.25778	30
31	10.86767	*09202	123.34587	11.34980	31
32	11.73708	•08520	134.51354	11.43500	32
33	12.67605	.07889	145.95062	11.51389	33
34	13.69013	•07305	158.62667	11.58693	34
35	14.78534	*06763	172.31680	11.65457	35
36	15.96817	•06262	187.10215	11.71719	36
37	17.24563	•05799	203.07032	11.77518	37
38	18.62528	•05369	220.31595	11.82887	38
39	20.11530	·04971	238.94122	11.87858	39
40	21.72452	•04603	259.05652	11.92461	40
41	23:46248	*04262 *02046	280.78104	11.96723	41
42	25.33948	*03946	304.24352		43
43	27.36664	*03654	329.58301	12:04324	43
44 45	29·55597 31·92045	03383	356·94965 386·50562	12.07707	44
46	34.47409	*02901	418.42607	12.13741	46
47	37.23201	•02686	452.90015	12.16427	
48	40.51057	•02487	490'13216	12.18914	47 48
49	43.42742	•02303	530.34274	12.51516	49
50	46.90161	*02132	573.77016	12.23348	50
20	40 90101	04154	3/3//010	5540	3

Years	ONE P	OUND	ONE POUND P	ER ANNUM	Years
10015	Amount	Present Value	Amount	Present Value	
51	50·65374	*01974	620·67177	12·25323	51
52	54·70604	*01828	671·32551	12·27151	52
53	59·08252	*01693	726·03155	12·28843	53
54	63·80913	*01567	785·11408	12·30410	54
55	68·91386	*01451	848·92320	12·31861	55
56	74°42696	°01344	917·83706	12·33205	56
57	80°38112	°01244	992·26402	12·34449	57
58	86°81161	°01152	1072·64514	12·35601	58
59	93°75654	°01067	1159·45676	12·36668	59
60	101°25706	°00988	1253·21330	12·37655	60
61	109·35763	*00914	1354·47036	12·38570	61
62	118·10624	*00847	1463·82799	12·39416	62
63	127·55474	*00784	1581·93423	12·40200	63
64	137·75912	*00726	1709·48897	12·40926	64
65	148·77985	*00672	1847·24808	12·41598	65
66	160·68223	*00622	1996·02793	12·42221	66
67	173·53681	*00576	2156·71016	12·42797	67
68	187·41976	*00534	2330·24698	12·43330	68
69	202·41334	*00494	2517·66673	12·43824	69
70	218·60641	*00457	2720·08007	12·44282	70
71	236·09492	*00424	2938·68648	12:44705	71
72	254·98251	*00392	3174·78140	12:45098	72
73	275·38111	*00363	3429·76391	12:45461	73
74	297·41160	*00336	3705·14502	12:45797	74
75	321·20453	*00311	4002·55662	12:46108	75
76	346·90089	*00288	4323.76115	12·46397	76
77	374·65296	*00267	4670.66205	12·46664	77
78	404·62520	*00247	5045.31501	12·46911	78
79	436·99522	*00229	5449.94021	12·47139	79
80	471·95483	*00212	5886.93543	12·47351	80
81	509.71122	*00196	6358·89026	12·47548	81
82	550.48812	*00182	6868·60148	12·47729	82
83	594.52717	*00168	7419·08960	12·47897	83
84	642.08934	*00156	8013·61677	12·48053	84
85	693.45649	*00144	8655·70611	12·48197	85
86	748·93301	*00134	9349·16260	12·48331	86
87	808·84765	*00124	10098·09561	12·48455	87
88	873·55546	*00114	10906·94326	12·48569	88
89	943·43990	*00106	11780·49872	12·48675	89
90	1018·91509	*00098	12723·93862	12·48773	90
91	1100°42830	*00091	13742·85370	12.48864	91
92	1188°46256	*00084	14843·28200	12.48948	92
93	1283°53956	*00078	16031·74456	12.49026	93
94	1386°22273	*00072	17315·28413	12.49098	94
95	1497°12055	*00067	18701·50686	12.49165	95
96 97 98 99	1616·89019 1746·24141 1885·94072 2036·81598 2199·76126	.00062 .00057 .00053 .00049	20198·62740 21815·51760 23561·75900 25447·69972 27484·51570	12.49227 12.49284 12.49337 12.49386 12.49432	96 97 98 99 100

Years	ONE :	POUND	ONE POUND	PER ANNUM	
Tears	Amount	Present Value	Amount	Present Value	Years
1	1.08500	•92166	1.00000	*92166	1
2	1.17723	•84946	2.08500	1*77111	2
3	1.27729	•78291	3.26223	2*55402	3
4	1.38586	•72157	4.53951	3*27560	4
5	1.50366	•66505	5.92537	3*94064	5
6	1.63147	•61295	7·42903	4.55359	6
7	1.77014	•56493	9·06050	5.11851	7
8	1.92060	•52067	10·83064	5.63918	8
9	2.08386	•47988	12·75124	6.11906	9
10	2.26098	•44229	14·83510	6.56135	10
11	2.45317	•40764	17·09608	6·96898	11
12	2.66169	•37570	19·54925	7·34469	12
13	2.88793	•34627	22·21094	7·69095	13
14	3.13340	•31914	25·09887	8·01010	14
15	3.39974	•29414	28·23227	8·30424	15
16	3.68872	•27110	31.63201	8·57533	16
17	4.00226	•24986	35.32073	8·82519	17
18	4.34245	•23028	39.32300	9·05548	18
19	4.71156	•21224	43.66545	9·26772	19
20	5.11205	•19562	48.37701	9·46334	20
21	5.54657	•18029	53·48906	9·64363	21
22	6.01803	•16617	59·03563	9·80980	22
23	6.52956	•15315	65·05366	9·96295	23
24	7.08457	•14115	71·58322	10·10410	24
25	7.68676	•13009	78·66779	10·23419	25
26	8·34014	•11990	86·35455	10·35409	26
27	9·04905	•11051	94·69469	10·46460	27
28	9·81822	•10185	103·74374	10·56645	28
29	10·65277	•09387	113·56196	10·66033	29
30	11·55825	•08652	124·21473	10·74684	30
31	12·54070	•07974	135·77298	10·82658	31
32	13·60666	•07349	148·31368	10·90008	32
33	14·76323	•06774	161·92034	10·96781	33
34	16·01810	•06243	176·68357	11·03024	34
35	17·37964	•05754	192·70168	11·08778	35
36	18·85691	•05303	210·08132	11·14081	36
37	20·45975	•04888	228·93823	11·18969	37
38	22·19883	•04505	249·39798	11·23474	38
39	24·08573	•04152	271·59681	11·27625	39
40	26·13302	•03827	295·68254	11·31452	40
41	28·35432	•03527	321·81555	11·34979	41
42	30·76444	•03251	350·16987	11·38229	42
43	33·37942	•02996	380·93431	11·41225	43
44	36·21667	•02761	414·31373	11·43986	44
45	39·29508	•02545	450·53040	11·46531	45
46	42.63517	*02345	489·82548	11.48877	46
47	46.25915	*02162	532·46065	11.51038	47
48	50.19118	*01992	578·71980	11.53031	48
49	54.45743	*01836	628·91098	11.54867	49
50	59.08632	*01692	683·36842	11.56560	50

77	ONE 1	POUND	ONE POUND	PER ANNUM	
Years	Amount	Present Value	Amount	Present Value	Years
51	64·10865	•01560	742·45473	11·58119	51
52	69·55789	•01438	806·56339	11·59557	52
53	75·47031	•01325	876·12127	11·60882	53
54	81·88528	•01221	951·59158	11·62103	54
55	88·84553	•01126	1033·47687	11·63229	55
56	96·39740	•01037	1122·32240	11.64266	56
57	104·59118	•00956	1218·71980	11.65222	57
58	113·48143	•00881	1323·31099	11.66104	58
59	123·12736	•00812	1436·79242	11.66916	59
60	133·59318	•00749	1559·91978	11.67664	60
61	144.94860	*00690	1693·51296	11 68354	61
62	157.26923	*00636	1838·46156	11 68990	62
63	170.63712	*00586	1995·73079	11 69576	63
64	185.14127	*00540	2166·36791	11 70116	64
65	200.87828	*00498	2351·50918	11 70614	65
66	217·95293	*00459	2552·38746	11.71073	66
67	236·47893	*00423	2770·34040	11.71496	67
68	256·57964	*00390	3006·81933	11.71885	68
69	278·38891	*00359	3263·39897	11.72245	69
70	302·05197	*00331	3541·78789	11.72576	70
71	327·72639	*00305	3843.83986	11·72881	71
72	355·58313	*00281	4171.56624	11·73162	72
73	385·80770	*00259	4527.14937	11·73421	73
74	418·60135	*00239	4912.95707	11·73660	74
75	454·18247	*00220	5331.55842	11·73880	75
76 77 78 79 80	492·78798 534·67495 580·12232 629·43272 682·93450	*00203 *00187 *00172 *00159 *00146	5785·74089 6278·52886 6813·20382 7393·32614 8022·75886	11.74083 11.74270 11.74443 11.74601	76 77 78 79 80
81	740·98394	*00135	8705·69337	11.74883	81
82	803·96757	*00124	9446·67730	11.75007	82
83	872·30481	*00115	10250·64487	11.75122	83
84	946·45072	*00106	11122·94969	11.75228	84
85	1026·89903	*00097	12069·40041	11.75325	85
86	1114·18545	*00090	13096·29945	11.75415	86
87	1208·89122	*00083	14210·48490	11.75497	87
88	131 1·6 4697	*00076	15419·37611	11.75574	88
89	1423·13696	*00070	16731·02308	11.75644	89
90	1544·10360	*00065	18154·16005	11.75709	90
91	1675·35241	*00060	19698·26365	11.75768	91
92	1817·75737	*00055	21373·61606	11.75823	92
93	1972·26674	*00051	23191·37343	11.75874	93
94	2139·90941	*00047	25163·64017	11.75921	94
95	2321·80171	*00043	27303·54958	11.75964	95
96	2519·15486	*00040	29625·35130	11.76004	96
97	2733·28302	*00037	32144·50616	11.76040	97
98	2965·61208	*00034	34877·78918	11.76074	98
99	3217·68911	*00031	37843·40126	11.76105	99
100	3491·19268	*00029	41061·09037	11.76134	100

Years	ONE P	OUND	ONE POUND	PER ANNUM	Years
10013	Amount	Present Value	Amount	Present Value	Loars
1	1.09000	°91743	1.00000	.91743	1
2	1.18810	°84168	2.09000	1.75911	2
3	1.29503	°77218	3.27810	2.53129	3
4	1.41158	°70843	4.57313	3.23972	4
5	1.53862	°64993	5.98471	3.88965	5
6 7 8 9	1.67710 1.82804 1.99256 2.17189 2.36736	59627 54703 50187 46043 42241	7·52333 9·20043 11·02847 13·02104 15·19293	4·48592 5·03295 5·53482 5·99525 6·41766	6 7 8 9
11	2·58043	38753	17·56029	6·80519	11
12	2·81266	35553	20·14072	7·16073	12
13	3·06580	32618	22·95338	7·48690	'13
14	3·34173	29925	26·01919	7·78615	14
15	3·64248	27454	29·36092	8·06069	15
16	3.97031	·25187	33.00340	8·31256	16
17	4.32763	·23107	36.97370	8·54363	17
18	4.71712	·21199	41.30134	8·75563	18
19	5.14166	·19449	46.01846	8·95011	19
20	5.60441	·17843	51.16012	9·12855	20
21 22 23 24 25	6.10881 6.65860 7.25787 7.91108 8.62308	16370 15018 13778 12640	56·76453 62·87334 69·53914 76·78981 84·70090	9·29224 9·44243 9·58021 9·70661 9·82258	21 22 23 24 25
26	9°39916	10639	93·32398	9·92897	26
27	10°24508	109761	102·72313	10·02658	27
28	11°16714	108955	112·96822	10·11613	28
29	12°17218	108215	124·13536	10·19828	29
30	13°26768	107537	136·30754	10·27365	30
31	14·46177	*06915	149·57522	10·34280	31
32	15·76333	*06344	164·03699	10·40624	32
33	17·18203	*05820	179·80032	10·46444	33
34	18·72841	*05339	196·98234	10·51784	34
35	20·41397	*04899	215·71075	10·56682	35
36	22·25123	°04494	236·12472	10·61176	36
37	24·25384	°04123	258·37595	10·65299	37
38	26·43668	°03783	282·62978	10·69082	38
39	28·81598	°03470	309·06646	10·72552	39
40	31·40942	°03184	337·88245	10·75736	40
41	34·23627	°02921	369·29187	10·78657	41
42	37·31753	°02680	403·52813	10·81337	42
43	40·67611	°02458	440·84566	10·83795	43
44	44·33696	°02255	481·52177	10·86051	44
45	48·32729	°02069	525·85873	10·88120	45
46	52.67674	*01898	574·18602	10·90018	46
47	57.41765	*01742	626·86276	10·91760	47
48	62.58524	*01598	684·28041	10·93358	48
49	68.21791	*01466	746·86565	10·94823	49
50	74.35752	*01345	815·08356	10·96168	50

COMPOUND INTEREST TABLES

Years	ONE POUND		ONE POUND PER ANNUM		V	
Lears	Amount	Present Value	Amount	Present Value	Years	
51	81 .04970	.01234	889.44108	10.97402	51	
52	88.34417	'01132	970.49077	10.98534	52	
53	96.29514	.01038	1058.83494	10.99573		
54	104.96171	.00953	1122.13000		53	
55	114.40826	.00874	1260.00180	11.00222	54	
56	124'70501	*00802			55	
57	135.92846	00802	1374.50006	11.02201	56	
58	148.16202	•00675	1499.20506	11.02937	57 58	
			1635.13352	11.03615		
59	161°49660 176°03129	.00619	1783.29553	11.04231	59	
		.00568	1944.79213	11.04799	60	
61	191.87411	00521	2120.82342	11.02320	61	
62	209.14278	.00478	2312.69753	11.05798	62	
63	227.96563	*00439	2521.84031	11.06237	63	
64	248.48253	'00402	2749.80594	11.06640	64	
65	270.84596	*00369	2998 28847	11.07009	65	
66	295.22210	*00339	3269.13444	11.07347	66	
67	321.79209	.00311	3564.35654	11.07658	67	
68	350.75338	.00285	3886.14862	11.07943	68	
69	382.32118	.00262	4236.90200	11.08202	69	
70	416.73009	'00240	4619.22318	11.08442	70	
71	454.23579	*00220	5035.95327	11.08665		
72	495.11702	.00202	5490.18906		71	
73	539.67755	.00182	5490 10900	11.08867	72	
74	588.24853		5985.30608	11.09022	73	
75	641.19089	'00170 '00156	6524.98362	11.09222	74	
76			7113.23215	11.09378	75	
77	698.89807 761.79890	.00143	7754.42304	11.09221	76	
78		.00131	8453.32112	11.09623	77	
	830.36080	'00120	9215.12002	11.09773	78	
79 80	905.09327	.00110	10045.48082	11.00883	79	
	986.55167	.00101	10950.57409	11.09982	80	
81	1075.34132	.00093	11937.12576	11.10028	81	
82	1172.12204	*00085	13012:46708	11,10193	82	
83	1277.61302	'00078	14184.28911	11'10241	83	
84	1392.59819	*00072	15462.20213	11.10313	84	
85	1517.93203	*00066	16854.80033	11.10329	85	
86	1654.54591	.00060	18372.73236	11.10440	86	
87	1803.45504	.00055	20027 27827	11.10492	87	
88	1965.76600	'00051	21830.73331	11.10246	88	
89	2142.68494	.00047	23796.49931	11.10203	89	
90	2335.52658	.00043	25939.18425	11.10632	90	
91	2545.72397	.00039	28274.71083	11.106.72	91	
92	2774.83913	'00036	30820.43481	11.10211	92	
93	3024.57465	.00033	33595 27394	11.10244		
94	3296.78637	*00030	36619.84859	11.10744	93	
95	3593.49715	*00028	39916.63497	11.10805	94 95	
96	3916.91189	.00026	43510.13211	11.10822		
97	4269.43396	'00023	47427 04400	11.10821	96	
98	4653.68302	00023	51696.47796		97	
99	5072.51449	'00020	56350.16098	11.10872	98	
100	5529.04079	.00018	61422.67547	11 10092	99	

COMPOUND INTEREST TABLES

	ONE 1	POUND	ONE POUND	PER ANNUM	
Years	Amount	Present Value	Amount	Present Value	Years
1	1·09500	•91324	1 ·00000	•91324	1
2	1·19903	•83401	2 ·09500	1•74725	2
3	1·31293	•76165	3 ·29403	2•50891	3
4	1·43766	•69557	4 ·60696	3•20448	4
5	1·57424	•63523	6 ·04462	3•83971	5
6	1.72379	·58012	7.61886	4·41983	6
7	1.88755	·52979	9.34265	4·94961	7
8	2.06687	·48382	11.23020	5·43344	8
9	2.26322	·44185	13.29707	5·87528	9
10	2.47823	·40351	15.56029	6·27880	10
11	2.71366	*36851	18.03852	6.64730	11
12	2.97146	*33654	20.75218	6.98384	12
13	3.25375	*30734	23.72363	7.29118	13
14	3.56285	*28067	26.97738	7.57185	14
15	3.90132	*25632	30.54023	7.82818	15
16	4·27195	*23409	34·44155	8·06226	16
17	4·67778	*21378	38·71350	8·27604	17
18	5·12217	*19523	43·39128	8·47127	18
19	5·60878	*17829	48·51345	8·64956	19
20	6·14161	*16282	54·12223	8·81238	20
21	6·72507	•14870	60·26384	8.96108	21
22	7·36395	•13580	66·98891	9.09688	22
23	8·06352	•12402	74·35286	9.22089	23
24	8·82956	•11326	82·41638	9.33415	24
25	9·66836	•10343	91·24593	9.43758	25
26	10·58686	•09446	100·91430	9·53203	26
27	11·59261	•08626	111·50116	9·61830	27
28	12·69391	•07878	123·09377	9·69707	28
29	13·89983	•07194	135·78767	9·76902	29
30	15·22031	•06570	149·68750	9·83472	30
31	16.66624	•06000	164·90781	9·89472	31
32	18.24954	•05480	181·57406	9·94952	32
33	19.98324	•05004	199·82359	9·99956	33
34	21.88165	•04570	219·80683	10·04526	34
35	23.96041	•04174	241·68848	10·08699	35
36	26·23664	*03811	265·64889	10·12511	36
37	28·72913	*03481	291·88553	10·15992	37
38	31·45839	*03179	320·61466	10·19171	38
39	34·44694	*02903	352·07305	10·22074	39
40	37·71940	*02651	386·51999	10·24725	40
41	41·30274	•02421	424·23939	10·27146	41
42	45·22650	•02211	465·54213	10·29357	42
43	49·52302	•02019	510·76864	10·31376	43
44	54·22771	•01844	560·29166	10·33220	44
45	59·37934	•01684	614·51936	10·34904	45
46	65·02038	*01538	673·89870	10·36442	46
47	71·19731	*01405	738·91908	10·37847	47
48	77·96106	*01283	810·11639	10·39130	48
49	85·367 3 6	*01171	888·07745	10·40301	49
50	93·47 7 26	*01070	973·44481	10·41371	50

Years	ONE I	POUND	ONE POUND PER ANNUM		Years
	Amount	Present Value	Amount	Present Value	rears
51	102.35760	•00977	1066-92206	10-42348	51
52	112.08157	.00892	1169.27966	10.43240	52
53	122.72932	•00815	1281.36123	10.44055	53
54	134.38860	.00744	1404.09055	10.44799	54
55	147.15552	•00680	1538.47915	10.45478	55
56	161.13529	•00621	1685.63467	10.46099	56
57	176.44315	.00567	1846.76996	10.46666	57
58	193.20525	.00218	2023.21311	10.47183	58
59	211.55974	.00473	2216-41835	10.47656	59
60	231.65792	.00432	2427.97809	10.48088	60
61	253.66542	•00394	2659·63601	10.48482	61
62	277·76364	•00360	2913.30143	10.48842	62
63	304.15118	·00329	3191.06507	10.49171	63
64	333.04554	•00300	3495.21625	10.49471	64
65	364.68487	*00274	3828-26180	10.49745	65
66	399.32993	*00250	4192.94667	10•49996	66
67	437.26628	*00229	4592.27660	10.50224	67
68	478.80657	*00209	5029.54288	10.50433	68
69	524.29320	•00191	5508.34945	10.50624	69
70	574.10102	*00174	6032.64265	10.50798	70
71	628.64065	•00159	6606.74370	10.50957	71
72	688.36151	.00145	7235.38435	10.21102	72
73	753.75586	.00133	7923.74586	10.51235	73
74	825.36266	·0012I	8677.50172	10.51356	74
75	903.77212	.00111	9502.86438	10.51467	75
76	989.63047	.00101	10406.63650	10.51568	76
77	1083.64536	*00092	11396.26697	10.21660	77
78	1186.59167	.00084	12479.91233	10.51744	78
79	1299.31788	•00077	13666.50400	10.51821	79
80	1422.75308	.00070	14965.82188	10.51892	80
81	1557.91462	•00064	16388-57496	10.51956	81
82	1705.91651	•00059	17946.48958	10.52015	82
83	1867.97858	*00054	19652.40609	10.52068	83
84	2045.43654	.00049	21520.38467	10.52117	84
85	2239.75302	.00045	23565.82122	10.52162	85
86	2452.52955	*00041	25805.57423	10.52202	86
87	2685.51986	.00037	25805·57423 28258·10378	10.52240	87
88	2940.64425	*00034	30943.62364	10.52274	88
89	3220.00545	•00031	33884.26789	10.52305	89
90	3525.90597	•00028	37104.27334	10.52333	90
91	3860.86703	•00026	4063017930	10.52359	91
92	4227.64940	*00024	44491 • 04634	10.52383	92
93	4629.27610	*00022	48718.69574	10.52404	93
94	5069.05732	*00020	53347.97184	10.52424	94
95	5550.61777	•00018	58417.02916	10.52442	95
96	6077.92646	•00016	63967 • 64693	10.52458	96
97	6655•32947	*00015	70045.57339	10.52473	97
98	7287.58577	*00014	76700.90286	10.52487	98
99	7979.90642	•00013	83988 48863	10.52500	99
100	8737*99753	•00011	91968-39505	10.52511	100

Years	ONE I	POUND	ONE POUND	PER ANNUM	Years
	Amount	Present Value	Amount	Present Value	Lears
1	1·10000	·90909	1.00000	.90909	1
2	1·21000	·82645	2.10000	1.73554	2
3	1·33100	·75131	3.31000	2.48685	3
4	1·46410	·68301	4.64100	3.16987	4
5	1·61051	·62092	6.10510	3.79079	5
6 7 8 9	1.77156 1.94872 2.14359 2.35795 2.59374	·56447 ·51316 ·46651 ·42410 ·3 ⁸ 554	7.71561 9.48717 11.43589 13.57948 15.93742	4·35526 4·86842 5·33493 5·75902 6·14457	6 7 8 9
11 12 13 14	2·85312 3·13843° 3·45227 3·79750 4·17725	*35049 *31863 *28966 *26333 *23939	18·53117 21·38428 24·52271 27·97498 31·77248	6:49506 6:81369 7:10336 7:36669 7:60608	11 12 13 14 15
16	4°59497	*21763	35°94973	7.82371	16
17	5°05447	*19784	40°54470	8.02155	17
18	5°55992	*17986	45°59917	8.20141	18
19	6°11591	*16351	51°15909	8.36492	19
20	6°72750	*14864	57°27500	8.51356	20
21	7·40025	·13513	64.00250	8·64869	21
22	8·14027	·12285	71.40275	8·77154	22
23	8·95430	·11168	79.54302	8·88322	23
24	9·84973	·10153	88.49733	8·98474	24
25	10·83471	·09230	98.34706	9·07704	25
26	11.91818	*08391	109·18177	9·16095	26
27	13.10999	*07628	121·09994	9·23722	27
28	14.42099	*06934	134·20994	9·30657	28
29	15.86309	*06304	148·63093	9·36961	29
30	17.44940	*05731	164·49402	9·42691	30
31	19·19434	*05210	181 '94342	9°47901	31
32	21·11378	*04736	201 '13777	9°52638	32
33	23·22515	*04306	222 '25154	9°56943	33
34	25·54767	*03914	245 '47670	9°60857	34
35	28·10244	*03558	271 '02437	9°64416	35
36	30·91268	°03235	299 12681	9·67651	36
37	34·00395	°02941	330 03949	9·70592	37
38	37·40434	°02673	364 04343	9·73265	38
39	41·14478	°02430	401 44778	9·75696	39
40	45·25926	°02209	442 59256	9·77905	40
41	49·78518	'02009	487·85181	9*79914	41
42	54·76370	'01826	537·63699	9*81740	42
43	60·24007	'01660	592·40069	9*83400	43
44	66·26408	'01509	652·64076	9*84909	44
45	72·89048	'01372	718·90484	9*86281	45
46	80·17953	'01247	791·79532	9·87528	46
47	88·19749	'01134	871·97485	9·88662	47
48	97·01723	'01031	960·17234	9·89693	48
49	106·71896	'00937	1057·18957	9·90630	49
50	117·39085	'00852	1163·90853	9·91481	50

Years	ONE PO	UND	ONE POUND P	ER ANNUM	Years
LOUIS	Amount	Present Value	Amount	Present Value	1 ears
51	129·12994	*00774	1281·29938	9.92256	51
52	142·04293	*00704	1410·42932	9.92960	52
53	156·24723	*00640	1552·47225	9.93600	53
54	171·87195	*00582	1708·71948	9.94182	54
55	189·05914	*00529	1880·59142	9.94711	55
56	207·96506	*00481	2069·65057	9.95191	56
57	228·76156	*00437	2277·61562	9.95629	57
58	251·63772	*00397	2506·37719	9.96026	58
59	276·80149	*00361	2758·01490	9.96387	59
60	304·48164	*00328	3034·81640	9.96716	60
61	334·92980	*00299	3339·29803	9·97014	61
62	368·42278	*00271	3674·22784	9·97286	62
63	405·26506	*00247	4042·65062	9·97532	63
64	445·79157	*00224	4447·91568	9·97757	64
65	490·37073	*00204	4893·70725	9·97961	65
66	539°40780	*00185	5384.07798	9·98146	66
67	593°34858	*00169	5923.48578	9·98315	67
68	652°68344	*00153	6516.83435	9·98468	68
69	717°95178	*00139	7169.51779	9·98607	69
70	789°74696	*00127	7887.46957	9·98734	70
71	868·72165	*00115	8677°21652	9·98849	71
72	955·59382	*00105	9545°93818	9·98954	72
73	1051·15320	*00095	10501°53199	9·99049	73
74	1156·26852	*00086	11552°68519	9·99135	74
75	1271·89537	*00079	12708°95371	9·99214	75
76	1399:08491	*00071	13980·84909	9·99285	76
77	1538:99340	*00065	15379·93399	9·99350	77
78	1692:89274	*00059	16918·92739	9·99409	78
79	1862:18201	*00054	18611·82013	9·99463	79
80	2048:40021	*00049	20474·00215	9·99512	80
81	2253°24024	*00044	22522'40236	9·99556	81
82	2478°56426	*00040	24775'64260	9·99597	82
83	2726°42069	*00037	27254'20686	9·99633	83
84	2999°06275	*00033	29980'62754	9·99667	84
85	3298°96903	*00030	32979'69030	9·99697	85
86	3628·86593	'00028	36278·65932	9'99724	86
87	3991·75253	'00025	39907·52526	9'99749	87
88	4390·92778	'00023	43899·27778	9'99772	88
89	4830·02056	'00021	48290·20556	9'99793	89
90	5313·02261	'00019	53120·22612	9'99812	90
91	5844·32487	'00017	58433°24873	9·99829	91
92	6428·75736	'00016	64277°57360	9·99844	92
93	7071·63310	'00014	70706°33096	9·99859	93
94	7778·79641	'00013	77777°96406	9·99871	94
95	8556·67605	'00012	85556°76046	9·99883	95
96 97 98 99	9412·34365 10353·57802 11388·93582 12527·82940 13780·61234	*00011 *00010 *00009 *00008 *00007	94113:43651 103525:78016 113879:35818 125268:29400 137796:12340	9·99894 9·99903 9·99912 9·99920 9·99927	96 97 98 99 100

See also Tables on pp. (82-97). (159)

Years	ONE 1	POUND	ONE POUND	PER ANNUM	
Icars	Amount	Present Value	Amount	Present Value	Years
1	1·11000	*90090	1.00000	•90090	1
2	1·23210	*81162	2.11000	1•71252	2
3	1·36763	*73119	3.34210	2•44371	3
4	1·51807	*65873	4.70973	3•10245	4
5	1·68506	*59345	6.22780	3•69590	5
6	1.87041	*53464	7·91286	4.23054	6
7	2.07616	*48166	9·78327	4.71220	7
8	2.30454	*43393	11·85943	5.14612	8
9	2.55804	*39092	14·16397	5.53705	9
10	2.83942	*35218	16·72201	5.88923	10
11	3·15176	·31728	19·56143	6·20652	11
12	3·49 ⁸ 45	·28584	22·71319	6·49236	12
13	3·88 ₃₂ 8	·25751	26·21164	6·74987	13
14	4·31044	·23199	30·09492	6·98187	14
15	4·78459	·20900	34·40536	7·19087	15
16	5·31089	•18829	39·18995	7·37916	16
17	5·89509	•16963	44·50084	7·54879	17
18	6·54355	•15282	50·39594	7·70162	18
19	7·26334	•13768	56·93949	7·83929	19
20	8·06231	•12403	64·20283	7·96333	20
21	8·94917	•11174	72·26514	8·07507	21
22	9·93357	•10067	81·21431	8·17574	22
23	11·02627	•09069	91·14788	8·26643	23
24	12·23916	•08170	102·17415	8·34814	24
25	13·58546	•07361	114·41331	8·42174	25
26	15·07986	•06631	127·99877	8·48806	26
27	16·73865	•05974	143·07864	8·54780	27
28	18·57990	•05382	159·81729	8·60162	28
29	20·62369	•04849	178·39719	8·65011	29
30	22·89230	•04368	199·02088	8·69379	30
31	25·41045	•03935	221·91317	8·73315	31
32	28·20560	•03545	247·32362	8·76860	32
33	31·30821	•03194	275·52922	8·80054	33
34	34·75212	•02878	306·83744	8·82932	34
35	38·57485	•02592	341·58956	8·85524	35
36	42.81808	•02335	380·16441	8·87859	36
37	47.52807	•02104	422·98249	8·89963	37
38	52.75616	•01896	470·51056	8·91859	38
39	58.55934	•01708	523·26673	8·93567	39
40	65.00087	•01538	581·82607	8·95105	40
41	72·15096	·01386	646·82693	8·96491	41
42	80·08757	·01249	718·97790	8·97740	42
43	88·89720	·01125	799•06547	8·98865	43
44	98·67589	·01013	887·96267	8·99878	44
45	109·53024	·00913	986·63856	9·00791	45
46	121·57857	•00823	1096·16880	9·01614	46
47	134·95221	•00741	1217·74737	9·02355	47
48	149·79695	•00668	1352·69958	9·03022	48
49	166·27462	•00601	1502·49653	9·03624	49
50	184·56483	•00542	1668·77115	9·04165	50

For explanation see pp. (8-14). (160)

Years	ONE I	POUND	ONE POUND	PER ANNUM	Years
x ears	Amount	Present Value	Amount	Present Value	rears
1	1·12000	-89286	1.00000	·89286	1
2	1·25440	-79719	2.12000	1·69005	2
3	1·40493	-71178	3.37440	2·40183	3
4	1·57352	-63552	4.77933	3·03735	4
5	1·76234	-56743	6.35285	3·60478	5
6	1.97382	*50663	8·11519	4·11141	6
7	2.21068	*45235	10·08901	4·56376	7
8	2.47596	*40388	12·29969	4·96764	8
9	2.77308	*36061	14·77566	5·32825	9
10	3.10585	*32197	17·54874	5·65022	10
11	3.47855	*28748	20·65458	5·93770	11
12	3.89598	*25668	24·13313	6·19437	12
13	4.36349	*22917	28·02911	6·42355	13
14	4.88711	*20462	32·39260	6·62817	14
15	5.47357	*18270	37·27971	6·81086	15
16	6·13039	•16312	42·75328	6·97399	16
17	6·86604	•14564	48·88367	7·11963	17
18	7·68997	•13004	55·74971	7·24967	18
19	8·61276	•11611	63·43968	7·36578	19
20	9·64629	•10367	72·05244	7·46944	20
21	10.80385	•09256	81.69874	7·56200	21
22	12.10031	•08264	92.50258	7·64465	22
23	13.55235	•07379	104.60289	7·71843	23
24	15.17863	•06588	118.15524	7·78432	24
25	17.00006	•05882	133.33387	7·84314	25
26	19·04007	·05252	150·33393	7·89566	26
27	21·32488	·04689	169·37401	7·94255	27
28	23·88387	·04187	190·69889	7·98442	28
29	26·74993	·03738	214·58275	8·02181	29
30	29·95992	·03338	241·33268	8·05518	30
31	33.55511	·02980	271·29261	8·08499	31
32	37.58173	·02661	304·84772	8·11159	32
33	42.09153	·02376	342·42945	8·13535	33
34	47.14252	·02121	384·52098	8·15656	34
35	52.79962	·01894	431·66350	8·17550	35
36	59·13557	·01691	484·46312	8·19241	36
37	66·23184	·01510	543·59869	8·20751	37
38	74·17966	·01348	609·83053	8·22099	38
39	83·08122	·01204	684·01020	8·23303	39
40	93·05097	·01075	767·09142	8·24378	40
41 42 43 44 45	104·21709 116·72314 130·72991 146·41750 163·98760	.00960 .00857 .00765 .00683	860·14239 964·35948 1081·08262 1211·81253 1358·23003	8·25337 8·26194 8·26959 8·27642 8·28252	41 42 43 44 45
46	183.66612	.00544	1522·21764	8·28796	46
47	205.70605	.00486	1705·88375	8·29282	47
48	230.39077	.00434	1911·58980	8·29716	48
49	258.03767	.00388	2141·98058	8·30104	49
50	289.00219	.00346	2400·01825	8·30450	50

Voers	ONE I	POUND	ONE POUND	PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	lears
1	1·13000	·88496	1.00000	·88496	1
2	1·27690	·78315	2.13000	1·66810	2
3	1·44290	·69305	3.40690	2·36115	3
4	1·63047	·61332	4.84980	2·97447	4
5	1·84244	·54276	6.48027	3·51723	5
6	2.08195	·48032	8·32271	3·99755	6
7	2.35261	·42506	10·40466	4·42261	7
8	2.65844	·37616	12·75726	4·79877	8
9	3.00404	·33288	15·41571	5·13166	9
10	3.39457	·29459	18·41975	5·42624	10
11	3·83586	•26070	21·81432	5.68694	11
12	4·33452	•23071	25·65018	5.91765	12
13	4·89801	•20416	29·98470	6.12181	13
14	5·53475	•18068	34·88271	6.30249	14
15	6·25427	•15989	40·41746	6.46238	15
16	7·06733	•14150	46·67173	6.60388	16
17	7·98608	•12522	53·73906	6.72909	17
18	9·02427	•11081	61·72514	6.83991	18
19	10·19742	•09806	70·74941	6.93797	19
20	11·52309	•08678	80·94683	7.02475	20
21	13·02109	•07680	92·46992	7·10155	21
22	14·71383	•06796	105·49101	7·16951	22
23	16·62663	•06014	120·20484	7·22966	23
24	18·78809	•05323	136·83147	7·28288	24
25	21·23054	•04710	155·61956	7·32998	25
26	23·99051	•04168	176·85010	7·37167	26
27	27·10928	•03689	200·84061	7·40856	27
28	30·63349	•03264	227·94989	7·44120	28
29	34·61584	•02889	258·58338	7·47009	29
30	39·11590	•02557	293·19922	7·49565	30
31	44·20096	•02262	332·31511	7·51828	31
32	49·94709	•02002	376·51608	7·53830	32
33	56·44021	•01772	426·46317	7·55602	33
34	63·77744	•01568	482·90338	7·57170	34
35	72·06851	•01388	546·68082	7·58557	35
36	81·43741	•01228	618·74933	7·59785	36
37	92·02428	•01087	700·18674	7·60872	37
38	103·98743	•00962	792·21101	7·61833	38
39	117·50580	•00851	896·19845	7·62684	39
40	132·78155	•00753	1013·70424	7·63438	40
41	150·04315	*00666	1146·48579	7·64104	41
42	169·54876	*00590	1296·52895	7·64694	42
43	191·59010	*00522	1466·07771	7·65216	43
44	216·49682	*00462	1657·66781	7·65678	44
45	244·64140	*00409	1874·16463	7·66086	45
46	276·44478	*00362	2118·80603	7.66448	46
47	312·38261	*00320	2395·25082	7.66768	47
48	352·99234	*00283	2707·63342	7.67052	48
49	398·88135	*00251	3060·62577	7.67302	49
50	450·73593	*00222	3459·50712	7.67524	50

For explanation see pp. (8-14).

37	ONE P	OUND	ONE POUND	PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	lears
1	1·14000	·87719	1.00000	·87719	1
2	1·29960	·76947	2.14000	1·64666	2
3	1·48154	·67497	3.43960	2·32163	3
4	1·68896	·59208	4.92114	2·91371	4
5	1·92541	·51937	6.61010	3·43308	5
6	2·19497	·45559	8·53552	3.88867	6
7	2·50227	·39964	10·73049	4.28830	7
8	2·85259	·35056	13·23276	4.63886	8
9	3·25195	·30751	16·08535	4.94637	9
10	3·70722	·26974	19·33730	5.21612	10
11	4·22623	·23662	23.04452	5.45273	11
12	4·81790	·20756	27.27075	5.66029	12
13	5·49241	·18207	32.08865	5.84236	13
14	6·26135	·15971	37.58107	6.00207	14
15	7·13794	·14010	43.84241	6.14217	15
16	8·13725	•12289	50·98035	6·26506	16
17	9·27646	•10780	59·11760	6·37286	17
18	10·57517	•09456	68·39407	6·46742	18
19	12·05569	•08295	78·96923	6·55037	19
20	13·74349	•07276	91·02493	6·62313	20
21	15.66758	•0638 3	104.76842	6.68696	21
22	17.86104	•05599	120.43600	6.74294	22
23	20.36158	•04911	138.29704	6.79206	23
24	23.21221	•04308	158.65862	6.83514	24
25	26.46192	•03779	181.87083	6.87293	25
26	30·16658	•03315	208·33274	6·90608	26
27	34·38991	•02908	238·49933	6·93516	27
28	39·20449	•02551	272·88923	6·96066	28
29	44·69312	•02237	312·09373	6·98304	29
30	50·95016	•01963	356·78685	7·00266	30
31	58.08318	*01722	407·73701	7·01988	31
32	66.21483	*01510	465·82019	7·03498	32
33	75.48490	*01325	532·03501	7·04823	33
34	86.05279	*01162	607·51991	7·05985	34
35	98.10018	*01019	693·57270	7·07005	35
36	111·83420	*00894	791·67288	7·07899	36
37	127·49099	*00784	903·50708	7·08683	37
38	145·33973	*00688	1030·99808	7·09371	38
39	165·68729	*00604	1176·33781	7·09975	39
40	188 88351	*00529	1342·02510	7·10504	40
41	215·32721	·00464	1530-90861	7·10969	41
42	245·47301	·00407	1746-23582	7·11376	42
43	279·83924	·00357	1991-70883	7·11733	43
44	319·01673	·00313	2271-54807	7·12047	44
45	363·67907	·00275	2590-56480	7·12322	45
46	414·59414	*00241	2954·24387	7·12563	46
47	472·63732	*00212	3368·83801	7·12774	47
48	538·80655	*00186	3841·47533	7·12960	48
49	614·23946	*00163	4380·28187	7·13123	49
50	700·23299	*00143	4994·52134	7·13266	50

See also Tables on pp. (82-97). (163)

37	ONE P	OUND	ONE POUND	PER ANNUM	Years
Years	Amount	Present Value	Amount	Present Value	Tears
1	1·15000	·86957	1.00000	*86957	1
2	1·32250	·75614	2.15000	1 *62571	2
3	1·52088	·65752	3.47250	2 *28323	3
4	1·74901	·57175	4.99338	2 *85498	4
5	2·01136	·49718	6.74238	3 *35216	5
6 7 8 9	2·31306 2·66002 3·05902 3·51788 4·04556	*43233 *37594 *32690 *28426 *24718	8·75374 11·06680 13·72682 16·78584 20·30372	3.78448 4.16042 4.48732 4.77158 5.01877	6 7 8 9 10
11	4·65239	•21494	24·34928	5.23371	11
12	5·35025	•18691	29·00167	5.42062	12
13	6·15279	•16253	34·35192	5.58315	13
14	7·07571	•14133	40·50471	5.72448	14
15	8·13706	•12289	47·58041	5.84737	15
16	9·35762	•10686	55.71747	5·95423	16
17	10·76126	•09293	65.07509	6·04716	17
18	12·37545	•08081	75.83636	6·12797	18
19	14·23177	•07027	88.21181	6·19823	19
20	16·36654	•06110	102.44358	6·25933	20
21	18·82152	•05313	118·81012	6·31246	21
22	21·64475	•04620	137·63164	6·35866	22
23	24·89146	•04017	159·27638	6·39884	23
24	28·62518	•03493	184·16784	6·43377	24
25	32·91895	•03038	212·79302	6·46415	25
26	37.85680	•02642	245.71197	6·49056	26
27	43.53531	•02297	283.56876	6·51353	27
28	50.06561	•01997	327.10408	6·53351	28
29	57.57545	•01737	377.16969	6·55088	29
30	66.21177	•01510	434.74514	6·56598	30
31	76·14354	·01313	500·95692	6·57911	31
32	87·56507	·01142	577·10045	6·59053	32
33	100·69983	·00993	664·66552	6·60046	33
34	115·80480	·00864	765·36535	6·60910	34
35	133·17552	·00751	881·17015	6·61661	35
36	153·15185	·00653	1014·34567	6.62314	36
37	176·12463	·00568	1167·49752	6.62881	37
38	202·54332	·00494	1343·62215	6.63375	38
39	232·92482	·00429	1546·16547	6.63805	39
40	267·86355	·00373	1779·09031	6.64178	40
41	308·04308	*00325	2046·95385	6.64502	41
42	354·24954	*00282	2354·99693	6.64785	42
43	407·38697	*00245	2709·24647	6.65030	43
44	468·49502	*00213	3116·63344	6.65244	44
45	538·76927	*00186	3585·12846	6.65429	45
46	619·58466	*00161	4123·89773	6.65591	46
47	712·52236	*00140	4743·48239	6.65731	47
48	819·40071	*00122	5456·00475	6.65853	48
49	942·31082	*00106	6275·40546	6.65959	49
50	1083·65744	*00092	7217·71629	6.66051	50

For explanation see pp. (8-14). (164)

THE PRESENT VALUE OF THE REVERSION OF A PERPETUITY OF £1 Years Years 13/6 $1\frac{1}{4}\%$ $1\frac{1}{2}\%$ 1% Deferred Deferred 99.00990 79.01235 65.68145 56.16006 T 78.03688 64.71079 55.19416 2 98.02960 2 63.75447 97.05901 77.07347 54.24488 3 3 53.31192 96.09893 76.12194 4 4 75.18217 61.88402 52.39500 5 95.14657 5 6 60.96948 51.49386 6 94.20452 74.25399 93.27181 60.06846 50.60822 78 73:33727 78 72.43188 59.18074 49.73781 92.34832 48.88237 91.43398 58.30615 9 71.53766 9 57.44448 48.04164 IO 90.52870 70.65447 IO 69.78220 56.59555 47:21537 TT 89.63237 II 88.74492 55.75916 46.40331 12 68.92069 12 87.86626 68.06982 54.93514 45.60522 13 13 86.99630 44.82085 67.22945 54.12329 14 14 44.04998 86.13495 15 66:39945 53:32344 15 16 43.29236 85.28213 65.57971 52.53541 16 42·54778 41·81600 17 18 64.77008 51.75902 84.43775 17 18 83.60173 63.97045 50.99411 41.09680 82.77399 63.18069 50.24050 19 IQ 49.49803 40.38998 20 81.95445 62.40068 20 39.69531 21 48.76653 61.63031 81.14302 21 39.01259 22 60.86944 48.04584 22 80.33962 47:33581 38.34161 23 60.11796 79.54418 23 78.75661 37.68217 46.63626 24 59:37577 24 25 37.03408 77.97684 58.64273 45.94706 25 45.26804 36.39713 26 77.20480 57.91875 26 27 28 44.59905 35.77113 27 76.44039 57.20370 35.15591 56.49748 43'93995 28 75.68356 43.29059 34.55126 29 55.79998 29 74.93421 55.11109 42.65083 33.95701 30 74.19229 30 31 42.02052 33.37298 31 54.43071 73.45771 32.79900 32 32 41.39953 72.73041 53.75873 40.78771 32.23489 33 33 72.01031 53.09504 31.68048 34 40.18494 71.29733 52.43954 34 31.13561 35 51.79214 39.59107 35 70.59142 36 30.60011 36 69.89250 51.15273 39.00599 30.07382 37 38 69.20049 50.52122 38.42954 37 37.86162 49.89750 29.55658 38 68.51534 49.28148 29.04823 39 67.83697 37:30209 39 28.54863 36.75082 40 67.16531 48.67307 40 41 28.05762 41 48.07216 36.20771 66.20031 42 27.57506 42 65.84189 47.47868 35.67262 27.10079 43 65 18999 46.89252 35.14544 43 46.31360 34.62605 26.63469 44 44 64.54455 45.74183 26.17660 45 34.11433 63.90549 45 46 25.72639 46 45.17712 33.61018 63.27276 47 48 25.28392 62.64630 44.61938 33.11348 47 48 24.84906 62.02604 44.06852 32.62412

For explanation see p. (14). See also Tables on pp. (98-105). (165)

43.52446

42.98712

49

50

61.41192

60.80388

32.14199

31.66698

24.42168

24.00165

49

50

	RESENT VAL	UE OF THE RE	EVERSION OF A	PERPETUIT	Y OF £
Years Deferred	2 %	21/4 %	2½ %	2 \frac{3}{4} %	Years Deferre
1	49.01961	43·46644	39.02439	35·39040	1
2	48.05844	42·50997	38.07258	34·44322	2
3	47.11612	41·57454	37.14398	33·52138	3
4	46.19227	40·65970	36.23803	32·62421	4
5	45.28654	39·76499	35.35417	31·75106	5
6 7 8 9	44·39857 43·52801 42·67452 41·83776 41·01742	38.88996 38.03419 37.19726 36.37873 35.57822	34:49188 33:65061 32:82986 32:02913 31:24794	30·90127 30·07423 29·26933 28·48596 27·72356	6 7 8 9
11	40·21315	34.79533	30·48579	26.98157	11
12	39·42466	34.02966	29·74224	26.25944	12
13	38·65163	33.28084	29·01682	25.55663	13
14	37·89375	32.54850	28·30909	24.87263	14
15	37·15074	31.83227	27·61862	24.20694	15
16	36·42229	31·13181	26·94500	23.55907	16
17	35·70813	30·44676	26·28780	22.92853	17
18	35·00797	29·77678	25·64664	22.31487	18
19	34·32154	29·12154	25·02111	21.71764	19
20	33·64857	28·48073	24·41084	21.13639	20
21	32·98879	27.85401	23.81545	20·57069	21
22	32·34195	27.24109	23.23459	20·02014	22
23	31·70780	26.64165	22.66789	19·48432	23
24	31·08607	26.05540	22.11501	18·96284	24
25	30·47654	25.48206	21.57562	18·45532	25
26	29.87896	24·92133	21·04939	17·96138	26
27	29.29310	24·37294	20·53599	17·48067	27
28	28.71873	23·83661	20·03511	17·01281	28
29	28.15562	23·31209	19·54645	16·55748	29
30	27.60354	22·79911	19·06971	16·11434	30
31	27.06230	22·29742	18·60460	15.68305	31
32	26.53167	21·80677	18·15082	15.26331	32
33	26.01144	21·32691	17·70812	14.85481	33
34	25.50141	20·85761	17·27621	14.45723	34
35	25.00138	20·39864	16·85484	14.07030	35
36 37 38 39 40	24.03055 23.55936 23.09741 22.64452	19·94977 19·51078 19·08145 18·66156 18·25092	16·44375 16·04268 15·65140 15·26966 14·89723	13.69372 13.32722 12.97053 12.62339 12.28554	36 37 38 39 40
41	22·20051	17·84931	14·53388	11.95673	41
42	21·76521	17·45654	14·17939	11.63672	42
43	21·33844	17·07241	13·83355	11.32527	43
44	20·92004	16·69673	13·49615	11.02217	44
45	20·50984	16·32932	13·16698	10.72717	45
46	20·10769	15.97000	12·84583	10.44007	46
47	19·71342	15.61858	12·53252	10.16065	47
48	19·32688	15.27489	12·22685	9.88871	48
49	18·94792	14.93877	11·92863	9.62405	49
50	18·57639	14.61004	11·63769	9.36647	50

For explanation see p. (14). (166)

Years Deferred	3 %	$3\frac{1}{4}\%$	$3\frac{1}{2}\%$	$3\frac{3}{4}\%$	Years Deferred
1	32·36246	29·80071	27.60525	25.70281	1
2	31·41986	28·86267	26.67174	24.77380	2
3	30·50472	27·95416	25.76979	23.87836	3
4	29·61623	27·07425	24.89835	23.01529	4
5	28·75362	26·22203	24.05638	22.18341	5
6 7 8 9	27.91614 27.10305 26.31364 25.54722 24.80313	25·39664 24·59723 23·82298 23·07311 22·34683	23·24288 22·45689 21·69747 20·96374 20·25482	21·38160 20·60877 19·86387 19·14590 18·45388	6 7 8 9
11	24.08071	21·64342	19·56988	17·78687	11
12	23.37933	20·96215	18·90810	17·14398	12
13	22.69737	20·30233	18·26869	16·52431	13
14	22.03726	19·66327	17·65091	15·92705	14
15	21.39539	19·04433	17·05402	15·35137	15
16 17 18 19 20	20·77223 20·16721 19·57982 19·00953 18·45585	18·44487 17·86428 17·30197 16·75735 16·22988	16·47731 15·92011 15·38175 14·86159	14.79650 14.26169 13.74621 13.24936 12.77047	16 17 18 19 20
21	17 91831	15.71902	13.87346	12·30888	21
22	17 39641	15.22423	13.40430	11·86398	22
23	16 88972	14.74501	12.95102	11·43516	23
24	16 39779	14.28089	12.51306	11·02185	24
25	15 92018	13.83137	12.08991	10·62347	25
26	15·45649	13·39600	11.68108	10·23948	26
27	15·00630	12·97433	11.28606	9·86938	27
28	14·56922	12·56594	10.90441	9·51266	28
29	14·14487	12·17040	10.53566	9·16883	29
30	13·73289	11·78731	10.17938	8·83742	30
31	13·33290	11.41628	9.83515	8·51800	31
32	12·94456	11.05693	9.50256	8·21012	32
33	12·56754	10.70889	9.18122	7·91337	33
34	12·20149	10.37181	8.87075	7·62734	34
35	11·84611	10.04534	8.57077	7·35166	35
36	11·50108	9.72914	8·28094	7.08593	36
37	11·16609	9.42289	8·00090	6.82982	37
38	10·84087	9.12629	7·73034	6.58296	38
39	10·52511	8.83902	7·46893	6.34502	39
40	10·21856	8.56080	7·21636	6.11568	40
41	9·92093	8·29133	6.97233	5.89463	41
42	9·63197	8·03034	6.73655	5.68157	42
43	9·35143	7·77757	6.50874	5.47621	43
44	9·07906	7·53276	6.28864	5.27828	44
45	8·81462	7·29565	6.07598	5.08750	45
46	8·55788	7.06600	5.87051	4.90361	46
47	8·30862	6.84359	5.67199	4.72637	47
48	8·06662	6.62817	5.48018	4.55554	48
49	7·83167	6.41954	5.29486	4.39088	49
50	7·60357	6.21747	5.11581	4.23218	50

See also Tables on pp. (98-105).

Years	10/	47.04	F - /	0 - 1	Year
eferred	4 %	4 ½ %	5 %	6 %	Deferr
I	24.03846	21.26528	19.04762	15.72327	I
2	23.11391	20.34955	18.14059	14.83328	2
3	22.22491	19.47326	17.27675	13.99366	3
4	21.37010	18.63469	16.45405	13.50126	4
5	20.54818	17.83224	15.67052	12.45431	5
6	19.75786	17.06435	14.92431	11.74935	6
7 8	18.99795	16.32952	14.21363	11.08429	7 8
	18.26725	15.62633	13·53679 12·89218	10.45688	8
9	17.56467 16.88910	14.30050	12.89218	9.86498	9
	. 1	14.30950	12.27827	9.30658	10
II	16.23952	13.69330	11.69359	8.77980	II
12	15.61493	13.10364	11.13672	8.28283	12
13	15.01435 14.43688	12.53937	10.60643	7.81399	13
14	13.88161	11.99939	10.10136	7.37169	14
15	,	11.48267	9.62034	6.95442	15
16	13.34770	10.98821	9.16223	6.56077	16
17	12.83433	10.21203	8.72593	6.18941	17
18	12.34070	10.06223	8.31041	5.83907	18
19	11.86606	9.62893	7.91468	5.20822	19
20	11.40967	9.21428	7.53779	5.19675	20
21	10.97084	8.81750	7.17885	4.90259	21
22	10.54888	8.43780	6.83700	4.62509	22
23	10.14316	8.07445	6.21143	4.36329	23
24	9.75304	7.72674	6.30136	4.11631	24
25	9.37792	7.39401	5.90606	3.88331	25
26	9.01723	7.07561	5.62482	3.66350	26
27	8.67041	6.77092	5.35697	3.45614	27 28
28	8·33694 8·01628	6.47935	5.10187	3.56021	28
29	7.70797	6.20033	4.85893	3.07595	29
30		5.93333	4.62755	2.90184	30
31	7.41151	5.67783	4.40719	2.73758	31
32	7·12645 6·85235	5.43333	4.19732	2.28263	32
33	6.58880	5.19936	3.99745	2.43644	33
34	6.33539	4.97546 4.76121	3.80710 3.62581	2.29853	34
	6.09172		9 9	2.16842	35
36	5.85742	4.55618	3.45315	2.04567	36
37 38	5.63213	4.35998	3.58841	1.92989	37
39	5.41551	4·17223 3·99256	3·13211 2·98296	1.82067	38
40	5.20723	3.82064	2.84091	1°71760 1°62037	39 40
41	5.00695	3.65611		•	1
42	4.81437	3.49867	2·70563 2·57679	1.52865	41
43	4.62920	3.34801	2.45409	1.44213 1.36050	42
44	4.45116	3.20384	2.33723	1 .28349	43
45	4.27996	3.06587	2.22593	1.51084	44
46	4.11232	2.93385	2.11993	1.14230	46
47	3.95706	2.80751	2.01899	1.07764	47
47 48	3.80487	2.68661	1.92284	1.01664	48
49	3.65853	2.57092	1.83128	.95910	49
50	3.21781	2.46021	1.74408	•90481	50

For explanation see p. (14). (168)

Years Deferred	7 °/。	8 °/。	9 °/。	10 °/。	Years Deferred
1	13·35113	11·57407	10·19368	9.09091	1
2	12·47770	10·71674	9·35200	8.26446	2
3	11·66140	9·92290	8·57982	7.51315	3
4	10·89850	9·18787	7·87139	6.83013	4
5	10·18552	8·50729	7·22146	6.20921	5
6	9·51917	7·87712	6·62519	5.64474	6
7	8·89642	7·29363	6·07816	5.13158	7
8	8·31442	6·75336	5·57629	4.66507	8
9	7·77048	6·25311	5·11586	4.24098	9
10	7·26213	5·78992	4·69345	3.85543	10
11	6·78704	5·36104	4·30592	3·50494	11
12	6·34303	4·96392	3·95039	3·18631	12
13	5·92806	4·59622	3·62421	2·89664	13
14	5·54025	4·25576	3·32496	2·63331	14
15	5·17780	3·94052	3·05042	2·39392	15
16	4·83907	3.64863	2·79855	2·17629	16
17	4·52249	3.37836	2·56748	1·97845	17
18	4·22663	3.12811	2·35549	1·79859	18
19	3·95012	2.89640	2·16100	1·63508	19
20	3·69170	2.68185	1·98257	1·48644	20
21	3·45019	2·48320	1.81887	1·35131	21
22	3·22447	2·29926	1.66869	1·22846	22
23	3·01353	2·12894	1.53090	1·11678	23
24	2·81638	1·97124	1.40450	1·01526	24
25	2·63213	1·82522	1.28853	•92296	25
26	2·45994	1.69002	1·18214	•83905	26
27	2·29901	1.56484	1·08453	•76278	27
28	2·14860	1.44892	·99498	•69343	28
29	2·00804	1.34159	·91283	•63039	29
30	1·87667	1.24222	·83746	•57309	30
31	1.75390	1·15020	•76831	•52099	31
32	1.63916	1·06500	•70487	•47362	32
33	1.53192	·98611	•64667	•43057	33
34	1.43170	•91307	•59328	•39143	34
35	1.33804	•84543	•54429	•35584	35
36	1·25051	·78281	*49935	*32349	36
37	1·16870	·72482	*45812	*29408	37
38	1·09224	·67113	*42029	*26735	38
39	1·02079	·62142	*38559	*24304	39
40	•95401	·57539	*35375	*22095	40
41	·89159	•53277	*32454	•20086	41
42	·83327	•49330	*29775	•18260	42
43	·77875	•45676	*27316	•16600	43
44	·72781	•42293	*25061	•15091	44
45	·68019	•39160	*22991	•13719	45
46	•63569	•362 5 9	·21093	•12472	46
47	•59411	•33573	·19351	•11338	47
48	•55524	•31086	·17754	•10307	48
49	•51892	•28784	·16288	•09370	49
50	•48497	•26652	·14943	•08519	50

See also Tables on pp. (98–105). (169)

Years Deferred	11 °/。	12 °/。	13 °/。	15 °/。	Years Deferr
1	8·19001	7.44048	6·80735	5.79710	1
2	7·37839	6.64328	6·02421	5.04096	2
3	6·64719	5.93150	5·33116	4.38344	3
4	5·98846	5.29598	4·71784	3.81169	4
5	5·39501	4.72856	4·17508	3.31451	5
6 7 8 9 10	4·86037 4·37871 3·94479 3·55386 3·20168	4·22193 3·76958 3·36569 3·00508 2·68311	3.69476 3.26970 2.89354 2.56065 2.66606	2·88218 2·50625 2·17935 1·89508 1·64790	6 7 8 9
11	2·88439	2·39563	2·00537	1·43295	11
12	2·59855	2·13896	1·77466	1·24605	12
13	2·34104	1·90978	1·57050	1·08352	13
14	2·10904	1·70517	1·38982	·94219	14
15	1·90004	1·52247	1·22993	·81930	15
16	1·71175	1·35935	1.08843	•71243	16
17	1·54211	1·21370	.96321	•61951	17
18	1·38929	1·08366	.85240	•53870	18
19	1·25161	·96756	.75434	•46844	19
20	1·12758	·86389	.66756	•40734	20
21	1·01584	.77133	•59076	*35420	21
22	·91517	.68869	•52279	*30800	22
23	·82448	.61490	•46265	*26783	23
24	·74277	.54902	•40942	*23290	24
25	·66916	.49019	•36232	*20252	25
26	·60285	*43767	·32064	•17610	26
27	·54311	*39078	·28375	•15313	27
28	·48929	*34891	·25111	•13316	28
29	·44080	*31153	·22222	•11579	29
30	·39712	*27815	·19665	•10069	30
31	·35776	·24835	•17403	*08755	31
32	·32231	·22174	•15401	*07613	32
33	·29037	·19798	•13629	*06620	33
34	·26159	·17677	•12061	*05757	34
35	·23567	·15783	•10674	*05006	35
36	·21231	•14092	•09446	*04353	36
37	·19127	•12582	•08359	*03785	37
38	·17232	•11234	•07397	*03291	38
39	·15524	•10030	•06546	*02862	39
40	·13986	•08956	•05793	*02489	40
41	•12600	•07996	·05127	•02164	41
42	•11351	•07139	·04537.	•01882	42
43	•10226	•06375	·04015	•01636	43
44	•09213	•05692	·03553	•01423	44
45	•08300	•05082	·03144	•01237	45
46	•07477	•04537	·02783	*01076	46
47	•06736	•04051	·02462	*00936	47
48	•06069	•03617	·02179	*00814	48
49	•05467	•03230	·01928	*00707	49
50	•04926	•02884	·01707	*00615	50

For explanation see p. (14).

The Present Value of the Perpetuity of One Year's Rent or Fine, Payable for Renewing Estates at Various Intervals and Rates of Interest

	YEARS' PURCHASE										
Years	3 %	4 %	5 %	6 %	8 %	10 %	Years				
2	16·4204	12·2549	9.7561	8.0906	6.0096	4.7619	2				
3	10·7839	8·0089	6.3439	5.2350	3.8504	3.0211	3				
4	7·9675	5·8872	4.6401	3.8098	2.7740	2.1547	4				
5	6·2786	4·6157	3.6195	2.9566	2.1307	1.6380	5				
6	5·1533	3·7690	2.9403	2.3894	1.7039	1.2961	6				
7	4.3503	3·1652	2:4564	1.9856	1.4009	1.0541	7				
10	2.9076	2·0823	1:5901	1.2646	.8629	.6275	10				
14	1.9509	1·3667	1:0205	.7931	.5162	.3575	14				
20	1.2405	·8395	:6049	.4531	.2731	.1746	20				
21	1.1624	·7820	:5599	.4167	.2479	.1562	21				
40	.4421	·2631	:1656	.1077	.0483	.0226	40				

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

TEN YEARS' LEASE

Years	2%	$2\frac{1}{2}\%$	3 %	$3\frac{1}{2}\%$	Years
1 2 3 4 5	·82034 1·65710 2·51059 3·38115 4·26912	.78119 1.58192 2.40267 3.24394 4.10623	.74409 1.51051 2.29992 3.11301 3.95049	.70892 1.44265 2.20207 2.98806 3.80156	1 2 3 4 5
6 7 8 9 10	5.17485 6.09870 7.04102 8.00219 8.98258	4·99009 5·89604 6·82464 7·77645 8·75206	4.81310 5.70159 6.61673 7.55933 8.53020	4.64353 5.51497 6.41692 7.35043 8.31661	6 7 8 9
	4 %	4 ½ %	5 %	17.95 %	
1 2 3 4 5	·67557 1·37815 2·10885 2·86876 3·65908	·64393 1·31683 2·02002 2·75485 3·52274	61391 1 ·25852 1 ·93536 2 ·64604 3 ·39225	·1919 ·4182 ·6851 I ·0000	1 2 3 4 5
6 7 8 9 10	4·48100 5·33581 6·22481 7·14936 8·11090	4·32519 5·16376 6·04005 6·95578 7·91272	4.17578 4.99848 5.86232 6.76935 7.72173	1·8094 2·3261 2·9355 3·6543 4·5021	6 7 8 9 10

For explanation see p. (15).

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

TWENTY YEARS' LEASE

Years	2 %	$2\frac{1}{2}\%$	3 %	3½%	Years
1 2 3 4 5	·67297 1·35940 2·05956 2·77372 3·50217	·61027 1·23580 1·87696 2·53416 3·20778	°55368 1°12397 1°71136 2°31638 2°93954	·50256 1·02272 1·56108 2·11828 2·69499	1 2 3 4 5
6 7 8 9	4·24518 5·00306 5·77609 6·56458 7·36885	3.89825 4.60598 5.33140 6.07495 6.83710	3·58141 4·24252 4·92348 5·62486 6·34728	3.29188 3.90966 4.54906 5.21085 5.89579	6 7 8 9
11 12 13 14 15	8·18919 9·02595 9·87944 10·75000 11·63797	7.61829 8.41902 9.23977 10.08103	7.09137 7.85779 8.64720 9.46029 10.29777	6.60471 7.33844 8.09786 8.88385 9.69735	11 12 13 14 15
16 17 18 19 20	12·54370 13·46755 14·40987 15·37104 16·35143	11.82719 12.73314 13.66174 14.61355 15.58916	11·16038 12·04887 12·96401 13·90661 14·87748	10·53932 11·41076 12·31271 13·24622 14·21240	16 17 18 19 20
	4 %	4½ %	5 %	12'304%	
1 2 3 4 5	*45639 *93103 1*42466 1*93803 2*47194	.41465 .84795 1.30075 1.77393 2.26839	*37689 *77262 1*18814 1*62444 2*08255	*098 *208 *332 *471 *628	1 2 3 4 5
6 7 8 9	3.02721 3.60468 4.20526 4.82985 5.47943	2·78511 3·32509 3·88936 4·47902 5·09522	2·56357 3·06864 3·59896 4·15580 4·74048	·803 1·000 1·221 1·470 1·749	6 7 8 9
11 12 13 14 15	6·15500 6·85758 7·58828 8·34819 9·13851	5.73915 6.41205 7.11524 7.85007 8.61796	5°35439 5°99900 6°67584 7°38652 8°13273	2.062 2.414 2.809 3.253 3.751	11 12 13 14
16 17 18 19 20	9°96043 10°81524 11°70424 12°62879 13°59033	9°42°041 10°25898 11°13527 12°05100 13°00794	8·91626 9·73896 10·60280 11·50983 12·46221	4·311 4·940 5·646 6·439 7·329	16 17 18 19 20

For explanation see p. (15).

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

TWENTY-ONE YEARS' LEASE

Years	2 %	2 ½ %	3 %	3½ %	Years
1 2 3 4 5	·65978 1·33275 2·01918 2·71934 3·43350	59539 1·20566 1·83119 2·47235 3·12955	°53754 1°09122 1°66151 2°24890 2°85392	'48557 '98813 1'50829 2'04665 2'60385	1 2 3 4 5
6 7 8 9	4·16195 4·90496 5·66284 6·43587 7·22436	3.80317 4.49364 5.20137 5.92679 6.67034	3·47708 4·11895 4·78006 5·46102 6·16240	3·18056 3·77745 4·39523 5·03463 5·69642	6 7 8 9
11 12 13 14 15	8.02863 8.84897 9.68573 10.53922 11.40978	7'43249 8'21368 9'01441 9'83516 10'67642	6.88482 7.62891 8.39533 9.18474 9.99783	6·38136 7·09028 7·82401 8·58343 9·36942	11 12 13 14 15
16 17 18 19 20 21	12·29775 13·20348 14·12733 15·06965 16·03082 17·01121	11·53872 12·42258 13·32853 14·25713 15·20894 16·18455	10.83531 11.69792 12.58641 13.50155 14.44415	10·18292 11·02489 11·89633 12·79828 13·73179 14·69797	16 17 18 19 20 21
	4 %	4½ %	5 %	11'564 %	
1 2 3 4 5	*43883 *89522 1*36986 1*86349 2*37686	·39678 ·81143 1·24473 1·69753 2·17071	°35894 °73583 1°13156 1°54708 1°98338	100 213 338 477 633	1 2 3 4 5
6 7 8 9	2·91077 3·46604 4·04351 4·64409 5·26868	2.66517 3.18189 3.72187 4.28614 4.87580	2 '44149 2 '92251 3 '42758 3 '95790 4 '51474	·806 I·000 I·216 I·457 I·726	6 7 8 9
11 12 13 14 15	5.91826 6.59383 7.29641 8.02711 8.78702	5.49200 6.13593 6.80883 7.51202 8.24685	5.09942 5.71333 6.35794 7.03478 7.74546	2·026 2·361 2·734 3·151 3·616	11 12 13 14 15
16 17 18 19 20 21	9.57734 10.39926 11.25407 12.14307 13.06762 14.02916	9°01474 9°81719 10°65576 11°53205 12°44778 13°40472	8·49167 9·27520 10·09790 10·96174 11·86877 12·82115	4.135 4.713 5.359 6.079 6.882 7.779	16 17 18 19 20 21

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

FORTY YEARS' LEASE

Years	2 %	2 ½ %	3 %	3 ½ %	Years
1 2 3 4 5	'45289 '91484 1'38603 1'86664 2'35686	'37243 '75417 1'14545 1'54652 1'95761	·30655 ·62231 ·94753 1·28252 1·62755	*25257 *51398 *78454 1*06458	3 3 4 5
6 7 8 9	2·85689 3·36692 3·88715 4·41778 4·95902	2·37898 2·81089 3·25359 3·70737 4·17248	1·98293 2·34898 2·72600 3·11434 3·51433	1.65439 1.96486 2.28620 2.61879 2.96302	6 7 8 9
11	5.51110	4·64922	3·92631	3·31930	11
12	6.07421	5·13788	4·35066	3·68805	12
13	6.64858	5·63876	4·78774	4·06970	13
14	7.23444	6·15216	5·23793	4·46472	14
15	7.83202	6·67839	5·70162	4·87355	15
16	8·44155	7·21778	6·17923	5·29670	16
17	9·06328	7·77066	6·67116	5·73466	17
18	9·69743	8·33736	7·17785	6·18794	18
19	10·34427	8·91822	7·69975	6·65710	19
20	11·00405	9·51361	8·23729	7·14267	20
21	11.67702	10·12388	8·79097	7.64523	21
22	12.36345	10·74941	9·36126	8.16539	22
23	13.06361	11·39057	9·94865	8.70375	23
24	13.77777	12·04777	10·55367	9.26095	24
25	14.50622	12·72139	11·17683	9.83766	25
26	15.24923	13:41186	11.81870	10·43455	26
27	16.00711	14:11959	12.47881	11·05233	27
28	16.78014	14:84501	13.16077	11·69174	28
29	17.56863	15:58856	13.86215	12·35352	29
30	18.37290	16:35071	14.58457	13·03846	30
31	19·19324	17·13190	15·32866	13.74738	31
32	20·03000	17·93263	16·09508	14.48111	32
33	20·88349	18·75338	16·88449	15.24053	33
34	21·75405	19·59465	17·69758	16.02652	34
35	22·64202	20·45694	18·53506	16.84002	35
36	23.54775	21°34080	19·39767	17.68199	36
37	24.47160	22°24675	20·28616	18.55343	37
38	25.41392	23°17535	21·20130	19.45538	38
39	26.37509	24°12716	22·14390	20.38889	39
40	27.35548	25°10277	23·11477	21.35507	40

For explanation see p. (15).

Number of Years' Purchase for the Renewal of any Number of Years Expired in a

FORTY YEARS' LEASE

Years	4 %	4 ½ %	5 %	8 %	Years	
ı	*20828	17192	14205	.04603	I	
2	*42490	35159	29120	.09574	2	
3	.65019	*53934	•44780	•14943	3	
4	.88449	°73554	.61224	20742	4	
5	1.12816	*94057	•78490	.27004	5	
6	1.38157	1.15485	•96619	•33768	6	
7 8	1.64512	1.37872	1.12624	41072	7	
	1.91922	1.61269	1.35641	·48961	8	
9	2.20428	1.85719	1·56628 1·78664	·57481 ·66683	9	
10	2 500/4	2 11209	1 70004		10	
II	2.80905	2.37969	2.01805	•76620	II	
12	3.12971	2.65871	2.26096	·87353	12	
13	3.46318	2.95028	2°51606 2°78391	·98945	13	
14	4.17069	3°25497 3°57337	3.06212	1.24983	15	
-5	4 17009			1,7 3		
16	4.24281	3.90610	3.36045	1.39585	16	
17	4.93593	4.25381	3.67052	1.25355	17	
18	5.34165	4.61716	3.99609	1.72387	18	
19	5.76361	4*99686 5*39364	4°33794 4°69688	2.10646	19	
20	6.20244	5 39304	4 09000	2 10040	20	
21	6.65883	5.80829	5.07377	2.32101	21	
22	7.13347	6.24159	5.46950	2.55272	22	
23	7.62710	6.69439	5.88502	2·80297 3·07324	23	
24	8·14047 8·67438	7.16757	6·32132 6·77943	3.36513	25	
25	8 0/438	7 00203	0 77943			
26	9.22965	8.17875	7.26045	3.68037	26	
27	9.80712	8.71873	7.76552	4.02083	27	
28	10.40770	9.28300	8·29584 8·85268	4.38853	20	
29	11.03229	9·87266 10·48886	9.43736	5.21453	30	
30	11 00107	10 40000	9 43/3		3-	
31	12.35744	11.13279	10.05127	5.67772	31	
32	13.06002	11.80569	10.69588	6.17797	32	
33	13.79072	12.50888	11·37272 12·08340	7.30173	33	
34 35	14.55063	13°24371 14°01160	12.82961	7.93190	35	
33	*3 34093	14 01100				
36	16.16287	14.81405	13.61314	8.61248	36	
37	17.01768	15.65262	14.43584	9.34751	37	
38	17.90668	16.52891	15·29968 16·20671	10.14135	38	
39	18·83123 19·79277	17°44464 18°40158	17.15909	11.92461	40	
40	19 19211	10 401 30	*/ *35-9	1	1	

SINKING FUND FOR THE REPAYMENT OF LOANS

Years	1 %	11/4 %	1½ %	13/4 %	Years
1	1.000000	1.000000	1 000000	1 ·000000	1
2	.497512	.496893	•496278	·495663	2
3	.330022	.329202	•328383	·327567	3
4	.246281	.245361	•244445	·243532	4
5	.196040	.195062	•194089	·193121	5
6 7 8 9	·162548 ·138628 ·120690 ·106740 ·095582	·161534 ·137589 ·119633 ·105671 ·094503	•160525 •136556 •118584 •104609 •093434	•159523 •135531 •117543 •103558 •092375	6 7 8 9
11	°086454	085367	.084294	•083231	11
12	°078849	077758	.076680	•075614	12
13	°072415	071321	.070240	•069173	13
14	°066901	065805	.064723	•063656	14
15	°062124	061026	.059944	•058877	15
16	*057945	°056847	°055765	.054700	15
17	*054258	°053160	°052080	.051016	17
18	*050982	°049884	°048806	.047745	18
19	*048052	°046955	°045878	.044821	19
20	*045415	°044320	°043246	.042191	20
2I	*043031	.041937	•040866	•039815	21
22	*040864	.039770	•038703	•037656	22
23	*038886	.037897	•036731	•035688	23
24	*037073	.035987	•034924	•033886	24
25	*035407	.034322	•033263	•032230	25
26	•033869	032787	°031732	•030703	26
27	•032446	031367	°030315	•029291	27
28	•031124	030049	°029001	•027982	28
29	•029895	028822	°027779	•026764	29
30	•028748	027679	°026639	•025630	30
31	*027676	*026609	*025574	·024570	31
32	*026671	*025608	*024577	·023578	32
33	*025728	*024668	*023641	·022648	33
34	*024840	*023784	*022762	·021774	34
35	*024004	*022951	*021934	·020951	35
36	*023214	*022165	°021152	.020175	36
37	*022468	*021424	°020414	.019443	37
38	*021762	*020720	°019716	.018750	38
39	*021092	*020054	°019055	.018094	39
40	*020456	*019421	°018427	.017472	40
41	·019851	*018821	·017831	·016882	41
42	·019276	*018249	·017264	·016321	42
43	·018727	*017705	·016725	·015787	43
44	·018204	*017186	·016210	·015278	44
45	·017705	*016690	·015720	·014793	45
46	*017228	·016217	·015251	*014330	46
47	*016771	·015764	·014803	*013888	47
48	*016334	·015331	·014375	*013466	48
49	*015915	·014916	·013965	*013061	49
50	*015513	·014518	·013572	*012674	50

For explanation see p. (17).

SINKING FUND

SINKING FUND FOR THE REPAYMENT OF LOANS						
Years	1 %	11/4 %	$1\frac{1}{2}\%$	13/4 %	Years	
51	015127	*014136	.013195	*012303	51	
52	·014756	*013769	.012833	.011947	52	
53	·014400	.013416	.012485	·011605	53	
54 55	*014057	.013078	.012121	.011277	54	
	·013726	*012751	.011830	.010961	55	
56	·013408	*012437	.01121	.010628	56	
57 58	·013102 ·012806	012135	.011223	.010366	57 58	
59	*012520	·011843	*010937	.010082		
60	012320	011302	·010393	*009814	59	
61		1	-	.009553	60	
62	°011978 °011720	*011028	.010136	*009302	61	
63	*01147 1	*010774 *010529	°009888 °009647	*009059	62	
64	.011230	010329	009047	*008825 *008598	63	
65	.010997	.010063	*009191	.008379	64	
66	.010771	.009841	1		65	
67	010551	009626	*008974 *008764	*008168	66	
68	.010339	*009417	·008560	*007964 *007766	68	
69	.010133	009215	.008363	*007575	69	
70	.009933	.009019	.008172	*007389	70	
71	*009739	.008820	.007987	.007210	1 .	
72	*009550	.008645	•007808	*007210	71	
73	.009367	.008466	.007634	*006868	72	
74	.009189	*008292	*007465	.006704	73	
75	.009016	.008123	·00730I	.006546	75	
76	°008848	*007959	.007141	.006392	76	
77 78	·008684	*007800	.006987	*006243		
	.008525	*007644	.006836	.006098	77 78	
79 80	*008370	*007493	·006690	.005958	79	
1	°008219	*007347	.006548	°005821	80	
8r	°008072	.007203	.006410	.005688	81	
82	'007929	*007064	.006276	.005559	82	
83	*007789	.006929	.006145	*005434	83	
84	007653	*006797	.009018	.005312	84	
85	*007520	*006668	.005894	·005194	85	
86	.007390	*006543	*005773	.005078	86	
87	*007264	*006420	.005656	·004966	87	
89	007141	*006301	005541	•004857	88	
90	°007021 °006903	*006185 *006071	*005430	*004751	89	
- 1		1	.002321	·004648	90	
91	*006789	*005961	005215	*004547	91	
93	*006676 *006567	*005853	*005112	*004449	92	
94	*006460	*005747 *005644	°005011	*004353	93	
95	*006355	*005544	*004817	°004260 °004169	94	
96	*006253				95	
97	*006153	°005445 °005349	°004723 °004632	*004081	96	
98	*006055	*005256	004543	.003911	97 98	
99	*005959	005164	004456	.003829		
100	·005866	.005074	004371	.003749	99	

	SINKING F	UND FOR TH	E REPAYMENT	OF LOANS	
Years	2 %	21/2%	2½ %	23/4%	Year
I	1,000000	1.000000	1.000000	I .000000	I
2	°495049	·494438	·493827	.493222	2
3	*326755	*325945	*325137	*324332	3
4	*242624	*241719	·240818	'239920	4
5	.192128	'191200	190247	189298	5
6	°158526	157535	·156550	°155571	6
7 8	*134512	133500	132495	131497	7 8
	116509	115485	114467	113458	
9	°102515 °091326	*101482 *090288	°100457	°099441 °088240	9
			, , ,		10
II	·082178	.081136	901080	*079086	II
12	*074565 *068118	·073517 ·067077	°072487 °066048	*071469	12
13	062602	.061562	.060536	*065033 *059525	13
15	.057825	•056789	.055766	·054759	15
16	.053650	.052617	.051599	050597	16
	033030	*048940	·047928	·046932	17
17	046702	.045677	·044670	*043681	18
19	.043782	*042762	°041760	.040778	19
20	*041157	*040142	.039147	.038172	20
21	.038785	.037776	.036787	.035819	21
22	·036631	*035628	·034646	.033686	22
23	°034668	.033671	·032696	.031744	23
24	.032871	.031880	.030913	*029969	24
25	.031221	*030236	*029276	*028340	25
26	·02 <u>9</u> 699	*028721	*027768	·026841	26
27	.028293	*027322	026377	.025458	27
28 20	*026990	°Q26025	*025088 *023891	024177	28
30	°025779 °024650	023699	023091	°022989 °021884	29
		.022653			30
31 32	°023596 °022611	022053	*021739 *020768	020855	31
33	.021687	.020757	.019820	018993	33
34	020819	.019897	.019007	018149	34
35	*020002	*019087	·018205	017356	35
36	*019233	.018325	*017451	.019911	36
27	·018507	*017606	*016741	.015910	37
38	·017821	.016928	·016070	.015248	38
39	.017171	.016282	*015436	.014623	39
40	·016556	.012677	·014836	*014032	40
41	015972	.012101	·014268	*013472	41
42	015417	*014554	.013728	012942	42
43	*014890	.014034	.013217	*012439	43
44 45	*014388 *013910	·013539	*012730 *012267	*011961	44
		1			45
46	*013453 *013018	*012619 *012191	°011826 °011407	*011075	46
47 48	·013618	*011782	*011407	°010664 °010272	47
49	012002	011702	*010623	0102/2	49
50	011823	.011018	*010258	'009541	50

For explanation see p. (17).

SINKING FUND

	SINKING FUND FOR THE REPAYMENT OF LOANS						
Years	2 %	21/2 %	2½ %	$2\frac{3}{4}\%$	Years		
51	*011459	*010661	*009909	*009200	51		
52	*011109	*010319	*009574	*008874	52		
53	*010774	*009991	*009254	*008563	53		
54	*010452	*009677	*008948	*008265	54		
55	*010143	*009375	*008654	*007980	55		
56 57 58 59 60	*009847 *009561 *009287 *009022 *008768	*009375 *009085 *008807 *008540 *008283 *008035	*008373 *008102 *007842 *007593 *007353	*007706 *007444 *007193 *006952 *006720	56 57 58 59 60		
61 62 63 64 65	*008523 *008286 *008058 *007839 *007626	*007797 *007568 *007347 *007134 *006929	007123 006901 006688 006482	*006498 *006284 *006079 *005881 *005691	61 62 63 64 65		
66 67 68 69 70	*007421 *007223. *007032. *006847 *006668	*006731 *006540 *006355 *006177	.006094 .005910 .005733 .005562 .005397	*005508 *005332 *005163 *005000 *004842	66 67 68 69 70		
71	*006494	*005838	.005238	*004690	71		
72	*006327	*005677	.005084	*004544	72		
73	*006165	*005522	.004936	*004403	73		
74	*006007	*005371	.004792	*004267	74		
75	*005855	*005226	.004654	*004136	75		
76	'005708	*005085	*004519	*004009	76		
77	'005564	*004948	*004390	*003886	77		
78	'005426	*004816	*004265	*003768	78		
79	'005291	*004688	*004143	*003654	79		
80	'005161	*004564	*004026	*003543	80		
81	*005034	*004444	•003912	'003437	81		
82	*004911	*004327	•003803	'003334	82		
83	*004792	*004214	•003696	'003234	83		
84	*004676	*004104	•003593	'003137	84		
85	*004563	*003998	•003493	'003044	85		
86	*004454	*003895	°003396	'002954	86		
87	*004348	*003795	°003303	'002867	87		
88	*004244	*003697	°003212	'002782	88		
89	*004144	*003603	°003124	'002700	89		
90	*004046	*003511	°003038	'002621	90		
91	*003951	.003422	*002955	*002545	91		
92	*003859	.003336	*002875	*002470	92		
93	*003769	.003252	*002797	*002399	93		
94	*003681	.003170	*002721	*002329	94		
95	*003596	.003091	*002648	*002261	95		
96 97 98 99 100	*003513 *003432 *003354 *003277 *003203	*003014 *002939 *002866 *002795 *002726	*002577 *002507 *002440 *002375 *002312	'002196 '002133 '002071 '002012 '001954	96 97 98 99		

Years.	3 %	31/4 %	$3\frac{1}{2}\%$	33 %	Years
I	I .000000	I '000000	I '000000	I '000000	I
2	492611	492005	'491400	*490798	2
3	*323530	*322731	321934	*321140	3
4	°239027	238137	237251	236369	4
5	188355	187415	·186481	185552	5
6	154598	153630	·152668		6
	130506	153030	132003	151712	
7 8	130300	111463	120344	127574	7 8
9	°098434	097436	.096446	*095465	9
10	*087231	*086231	.085241	.084261	10
II I2	• • • • • • • • • • • • • • • • • • • •	.077079	°076092	.075115	11
	*07046 2	*069467	*068484 *062062	067512	
13	*064030 *058526	*063039 *057542	056571	°061096	13
15	*053767	052789	050571	055013	15
16	*049611	•048640	.047685	.046745	16
17 18	*045953	*044990	*044043	*043113	17
	°042709	°041754 °038868	*040817	039897	18
19 20	039814		037940	'03703I	19
	*037216	.036279	*035361	034462	20
21	.034872	.033944	.033037	'032149	21
22	°032747	.031829	.030932	·03005 5	22
23	030814	*029906	*029019	028153	23
24	*029047	.028149	.027273	*026419	24
25	°027428	.026539	*025674	.024832	25
26	.025938	*025060	*024205	°023375	26
27	*024564	°023696	*022852	.022033	27
28	*023293	022435	'021603	'020795	28
29	022115	021267	*020445	'019650	29
30	021019	*020182	'019371	.018288	30
31	,019999	019172	.018372	.017600	31
32	'019047	*018230	.017442	.019981	32
33	*018156	*017350	.016572	*015824	33
34	017322	*016526	*015760	*015023	34
35	.016539	.015753	.014998	*014273	35
36	*015804	.012028	.014284	.013571	36
37 38	.012112	.014346	.013613	.012911	37 38
	*014459	*013704	*012982	.012292	
39	013844	*013099	*012388	'011709	39
40	*013262	.012528	.011824	.011129	40
41	.012712	.011988	.011298	010642	41
42	*012192	.011478	.010298	.010123	42
43	.011698	*010994	.010322	.009691	43
44	011230	.010536	*009878	*009254	44
45	.010785	.010101	'009453	*008841	45
46	.010363	009688	°009051	*008449	46
47 48	*009961	*009296	.008669	.008078	47
	*009578	*008923	.008306	*007726	48
49	*009213	*008568	.007962	*007392	49
50	·008866	1008230	*007634	*007074	50

For explanation see p. (17), (180)

SINKING FUND

	SINKING FUND FOR THE REPAYMENT OF LOANS							
Years	3 %	31/4 %	3½ %	3 3 %	Years			
51	'008534	*007908	'007322	'006772	51			
52	'008217	*007601	'007024	'006485	52			
53	'007915	*007308	'006741	'006212	53			
54	'007626	*007028	'006471	'005952	54			
55	'007349	*006761	'006213	'005704	55			
56	·007085	*006506	*005967	'005468	56			
57	·006831	*006261	*005732	'005242	57			
58	·006588	*006028	*005508	'005028	58			
59	·006356	*005804	*005294	'004822	59			
60	·006133	*005590	*005089	'004627	60			
61	*005919	*005385	'004892	'004440	61			
62	*005714	*005188	'004705	'004261	62			
63	*005517	*005000	'004525	'004090	63			
64	*005328	*004819	'004353	'003927	64			
65	*005146	*004646	'004188	'003771	65			
66 67 68 69	*004971 *004803 *004642 *004486 *004337	*004479 *004320 *004166 *004019 *003877	'004030 '003879 '003734 '003595 '003461	'003621 '003478 '003341 '003210 '003085	66 67 68 69 70			
71	*004193	*003741	'003333	'002964	71			
72	*004054	*003610	'003210	'002849	72			
73	*003921	*003484	'003092	'002738	73			
74	*003792	*003363	'002978	'002633	74			
75	*003668	*003247	'002869	'002531	75			
76	'003548	*003135	'002764	'002434	76			
77	'003433	*003027	'002664	'002340	77			
78	'003322	*002923	'002567	'002250	78			
79	'003215	*002823	'002474	'002164	79			
80	'003112	*002727	'002385	'002082	80			
81 82 83 84 85	'003012 '002916 '002823 '002733 '002647	*002634 *002545 *002459 *002376 *002295	'002299 '002216 '002137 '002060 '001987	'002003 '001926 '001853 '001783	81 82 83 84 85			
86	*002563	'002218	'001916	'001651	86			
87	*002482	'002144	'001848	'001589	87			
88	*002404	'002072	'001782	'001529	88			
89	*002329	'002003	'001719	'001472	89			
90	*002256	'001936	'001658	'001416	90			
91 92 93 94 95	002185 002117 002051 001987 001926	*001872 *001809 *001749 *001691 *001635	001599 001543 001488 001436 001385	*001363 *001312 *001263 *001216	91 92 93 94 95			
96 97 98 99	001866 001809 001753 001699 001647	001582 001529 001479 001430 001384	'001337 '001290 '001245 '001201 '001159	'001127 '001085 '001045 '001006 '000969	96 97 98 99			

Years	4 %	41/4 %	4½%	5 %	Years
I	I .000000	I.000000	I .000000	I .000000	I
2	·490196	·489596	·48899 7	·487805	2
3	.320349	.319259	.318773	·317209	3
4	·235490	*234615	°233744	*232012	4
5	·184627	.183702	182792	·180975	5
6	·150762	'149817	148878	147017	6
7	126610	125652	124701	122820	7 8
	108528	107565	*106609	*104722 *090690	
9	°094493 °083291	*093529 *082330	*092575 *081379	*079505	9
11	*074149 *066552	•073193	*072248 *064666	°070389 °062825	11
13	°060144	059203	*058275	056456	13
14	.054669	053738	052820	051024	14
15	.049941	*049020	*048114	.046342	15
16	.045820	*044910	*044015	.042270	16
17	042199	041300	.040418	.038699	17
18	.038993	.038107	.037237	.035546	18
19	.036139	.035264	.034407	.032745	19
20	.033582	.032720	.031876	.030243	20
21	.031280	.030431	·029601	.027996	21
22	.029199	*028362	.027546	025971	22
23	.027309	*026486	·02568 2	.024137	23
24	.025587	.024776	.023987	·02247I	24
25	*024012	.023212	'022439	.020952	25
26	.022567	.021783	*021021	.019564	26
27	.021239	*020467	019719	018292	27
28 29	°020013	°019255	*018521 *017415	°017123 °016046	28
30	·017830	017098	01/413	015051	30
_	·016855	.016137	015443		_
31 32	010055	010137	015443	°014132 °013280	31
33	015949	013243	*013745	*012490	32
34	.014312	.013635	012982	·011755	34
35	.013577	.012910	·012270	.011072	35
36	.012887	*012232	.011909	*010434	36
37	012240	.011292	.010984	*009840	37
38	·011632	*011002	*010402	1009284	38
39	.011091	.010444	*009856	*008765	39
40	·010523	.009918	*009343	*008278	40
41	.010012	.009424	*008862	.007822	41
42	*009540	*008959	*008409	.007395	42
43	*009090 *008665	*008521 *008107	*007982 *007581	*006993 *006616	43
44 45	•008262	.003107	1007501	*006262	44
	*007882	1	00/202		45
46 47	007522	*007348 *006999	*006507	°005928 °005614	46
48	.007181	.006669	.006180	.005318	47
49	.006857	•006356	*005887	*005040	49
50	•006550	.006060	'005602	1004777	50

For explanation see p. (17). (182)

SINKING KUND

SINKING FUND FOR THE REPAYMENT OF LOANS						
Years	4 %	41/0	4½%	5 %	Years	
51	.006259	.005779	*005332	*004529	51	
52	005982	.005513	*005077	.004295	52	
53	.005719	1005261	.004835	.004073	53	
54	.005469	.002021	·00460 5	•003864	54	
55	·005231	.004793	*004388	*003667	55	
56	.005002	.004577	'00418 1	·003480	56	
57 58	·004789	·004371	.003985	.003303	57	
58	'004584	*004175	·003799	003136	58	
59 60	004388	.003989	*003622	*002978 *002 \$ 28	59 60	
	*004202	.003815	*003454			
61	*004024	.003643	.003295	.002686	61	
62	*003854	.003482	*003143	*002552	62	
63	003692	·003329	·002998 ·002861	°002424 °002304	64	
64	.003538	·003183 ·003044	002301	002304	65	
65	.003390			1	66	
66	.003249	.002912	°002606	*002081	67	
67	.003115	*002785	·002488	*001978 *001880	68	
68	1002986 1002863	.002665	*00237 5 *00226 7	001330	69	
69 70	*002745	*002549 *002440	.002165	.001699	70	
		1	002068	.001616		
71	002633	.002335	002003	*001536	71 72	
72	*002525	'002234 '002139	.001886	001330	73	
73	*002422 *002323	.002047	.001802	'001390	74	
74 75	.002323	.001960	'001721	'001322	75	
		.001877	.001644	.001257	76	
76	*002139 *002052	0013/7	001571	,001106		
77 78	.001095	001721	001501	.001138	77 78	
70	,001800	.001648	'001434	.001082	79	
79 80	.001814	.001578	.001371	.001030	80	
81	.001741	'001511	.001310	*000980	81	
82	001672	.001448	'001252	*000932	82	
83	.001602	.001387	.001197	*000887	83	
84	.001541	.001329	001144	*000844	84	
85	.001479	.001273	.001093	.000803	85	
86	'001420	.001219	.001045	.000764	86	
87	.001364	'001168	.000999	.000727	87	
88	.001310	.001110	.000955	*000692	88	
89	.001258	.001023	.000913	*000659	89	
90	*001208	'001028	.000873	*000627	90	
91	.001160	•000985	•000835	*000597	91	
92	.001114	.000944	.000798	.000568	92	
93	.001070	*000905	.000763	'000541	93	
94	*001028	.000867	·000730	.000515	94	
95	*000987	*000831	·000698	*000490	95	
96	.000949	.000796	•000667	*000466	96	
97	116000.	.000763	*000638	*000444	97	
98	*000875	000732	.000010	000423	98	
99	*000841 *000808	*00070I	·000584 ·000558	°000402 °000383	100	
100	000000	*000672	000550	000303	100	

Years	6 %	7%	8%	10 %	Year
1	I .000000	I .000000	I .000000	I .000000	I
2	.485437	483092	°480769	·476190	2
3	.314110	'311052	•308033	.302112	3
4	·228591	*225228	*221921	*215471	4
5	•177396	173891	.170456	•163798	5
	•143363	139796	.136315	129607	6
7 8	.101036	·115553 ·097468	112072	105406	7 8
9	087022	.083486	*094015 *080079	·087444 ·073641	9
10	075868	.072377	•069029	0/3041	10
II	.066793	.063357	•060076		II
12	.059277	055902	.052695	•053963 •046763	12
13	052960	.049651	.046522	*040779	13
14	.047585	.044345	.041297	.035746	14
15	·042963	.039795	.036829	.031474	15
16	·0389 52	·035858	.032977	.027817	16
17	·035445	.032425	.029629	'024664	17
18	.032357	.029413	.026702	021930	18
19	029621	.026753	.024128	.019547	19
20	.027185	*024393	°021852	·017460	20
21	·025005	.022289	·019832	·015624	21
22	'023046	*020406	.018033	*014005	22
23	021278	*018714	.016422	*012572	23
24 25	°019679 °018227	·017189	·014978	*011300	24
26	•		.013679	.010168	25
27	°016904 °015697	*014561	*012507	*009159	26
28	013097	*013426 *012392	°011448 °010489	*008258	27 28
29	.013280	011449	.009618	*007451 *006728	20
30	.012649	.010286	008827	*006079	30
31	·011792	*009797	.008102	.005496	
32	011002	009073	*007451	003490	31
33	*010273	.008408	006852	.004499	33
34	•009598	.007797	*006304	.004074	34
35	*008974	.007234	.005803	•003689	35
36	·00839 5	.006712	.005345	.003343	36
37	.007857	.006237	'004924	.003030	37
38	*007358	.005795	.004539	*002747	38
39	°006894 °006462	*005387 *005009	·004185	*002491	39
			.003860	*002259	40
4I 42	*006059 *005683	*004660 *004336	·003562	1002050	41
43	.005333	.004330	*003287 *003034	°001860	42
44	•005006	.003758	003034	*001532	43
45	*004701	.003499	*002587	.001391	44
46	*004415	.003260	.002390	001263	46
47	.004148	'003037	002390	001147	
48	003898	*002831	'002040	.001041	47 48
49	.003664	*002639	·001886	.000946	49
50	'003444	*002460	°001743	.000859	50

For explanation see p. (17).

SINKING FUND

SINKING FUND FOR THE REPAYMENT OF LOANS							
Years	6 %	7 %	8 %	10 %	Years		
51	*003239	'002294	.001911	*000780	51		
52	.003046	.002139	.001490	.000709	52		
53	.002866	*001995	.001377	.000644	53		
54	.002696	.001861	.001274	000585	54		
55	.002537	.001736	·001178	.000532	55		
56	·002388	.001620	.001000	.000483	56		
57	.002247	.001212	.001008	.000439	57		
58	.002116	.001411	.000932	.000399	57 58		
59	.001992	.001317	.000862	'000363	59		
59 60	·001876	.001229	.000798	.000329	60		
61	.001766	.001147	*000738	*000299	61		
62	·001664	170100	.000683	*000272	62		
63	·001567	.001000	'000632	'000247	63		
64	*001476	.000934	.000585	*000225	64		
65	.001391	*000872	.000241	*000204	65		
66	.001310	*000814	.000201	.000186	66		
67	.001235	.000760	'000464	.000169	67		
68	.001163	.000710	'000429	.000123	68		
69	9001000	.000663	.000397	'000139	69		
70	.001033	*000620	*000368	.000127	70		
71	*000974	.000579	.000340	.000112	71		
72	.000918	.000241	*000315	.000102	72		
73	.000865	*000505	1000292	.000092	73		
74	.000812	.000472	.000270	.000086	74		
75	.000769	°00044I	.000250	.000079	75		
76	.000725	.000412	·00023I	.000072	76		
77 78	'000683	.000385	*000214	.000062	77		
78	.000644	.000359	.000198	'000059	78		
79	*000607	•000336	.000183	*000054	79		
80	.000573	.000314	.000120	.000049	80		
81	.000540	*000293	.000157	*000044	81		
82	*000509	*000274	.000146	'000040	82		
83	*000480	*000256	*000135	'000037	83		
84	*000453	*000239	.000122	.000033	84		
85	*000427	*000223	.000119	.000030	85		
86	*000402	*000209	*000107	*000028	86		
87	.000380	.000195	•000099	*000025	87		
88	.000328	.000185	*000092	.000023	88		
89	.000338	.000170	*000085	*00002I	89		
90	.000318	.000159	.000079	.000019	90		
91	*000300	.000149	*000073	.000017	91		
92	*000283	.000139	*000067	.000012	92		
93	*000267	.000130	*000062	.000014	93		
94	*000252 *000238	*000121 *000113	*000058 *000053	*000013 *000012	94		
95	*000238				95		
96 97	*000224 *000211	.000009	*000049 *000046	010000,	96		
98	.000199	*000092	*000042	.000000	98		
99	.000188	.000086	.000039	,000008	99		
100	.000177	.000081	1000036	.000007	100		

Value of an Annuity Yielding Interest on Capital at 3 and $3\frac{1}{3}$ PER CENT., and Replacing Capital when Invested at Lower Rates

Yrs.	3 & 2 %	3 & 2½ %	$3\frac{1}{2} & 2\%$	$3\frac{1}{2}&2\frac{1}{2}\%$	$3\frac{1}{2} & 3 \%$	Yrs
	197087	•97087	•96618	*96618	•96618	I
2	1.90458	1.90903	1.88662	1.89098	1.89534	2
3	2.80304	2.81582	2.76430	2.77672	2.78916	i e
4	3.66806	3.69252	3.60200	3.62558	3.64928	3
						4
5	4.20129	4.54036	4.40221	4.43957	4.47719	5
6	5.30431	5.36020	5.16722	5.22057	5.27433	6
7	6.07858	6.15402	5.89929	5.97031	6.04206	7
8	6.82548	6.92198	6.60023	6.68991	6.78167	7 8
9	7.54629	7.66537	7.27191	7.38242	7.49435	9
10	8.24222	8.38513	7.91599	8.04772	8.18126	10
II	8.91441	9.08216	8.53403	8.68765	8.84349	II
12	9.56392	9.75732	9.12745	9.30344	9°48208	12
13	10.19172	10.41143	9.69759	9.89626	10.00800	13
14	10.79891	11.04526	10.24569	10.46720	10.69217	14
15	11.38628	11.65957	10.77291	11.01729	11.26550	15
!	- J					
16	11.95455	12.25505	11.58030	11.54748	11.81881	16
17	12.20471	12.83239	11.76881	12.05869	12.35292	17
18	13.03745	13'39224	12.23958	12.55176	12.86857	18
19	13.55348	13.93522	12.69329	13.02751	13.36620	19
20	14.05349	14.46192	13.13085	13.48670	13.84740	20
21	14.53810	14.97290	13.55293		· · · ·	
				13.93003	14.31193	21
22	15.00794	15.46872	13.96036	14.35820	14.76071	22
23	15.46357	15.94988	14.35377	14.77184	15.19436	23
24	15.90556	16.41690	14.73381	15.17155	15.61343	24
25	16.33441	16.87025	15.10108	15.55792	16.01848	25
26	16.75063	17:31040	15.45613	15.93150	16.41004	26
27	17.15469	17.73777	15.79951	16.29278	16.78860	
28						27
	17.54704	18.15279	16.13172	16.64227	17.15465	28
29	17.92810	18.55588	16.45322	16.98045	17.50864	29
30	18.29828	18.94742	16.76448	17:30773	17.85100	30
31	18.65799	19:32778	17.06591	17.62456	18.18217	31
32	19.00757	19.69733	17.35791	17.93133	18.50254	32
33	19'34740	20.05640	17.64087	18.22842	18.81251	
						33
34	19.67781	20.40535	17.91515	18.51620	19.11243	34
35	19.99912	20.74448	18.18100	18.79502	19.40267	35
36	20:31164	21.07412	18.43900	19.06523	19 68357	36
37	20.61567	21 '39454	18.68922	19:32707	19.95545	
38	20.01120	21.70604	18.93202	19.58092	20.51863	37 38
39	21.19940	22.00890	19.16768	19.82705	20.47340	39
40	21.47962	22.30339	19.39648	20.06572	20'72007	40
41	21.75243	22.28975	19.61866	20.29721	20.95891	41
42	22.01804	22.86825	19.83446	20.22200	51.19018	42
43	22.27671	23.13910	20.04412	20.73962	21.41414	43
44	22.52864	23.40256	20.24786	20.95102	21.63105	44
45	22.77405	23.65883	20.44588	21.12618	21.84113	45
46	23.01312	23.90814	20.63838	21.35531	22.04462	46
47	23.24613	24.15069	20.82556	21.24862	22.24174	47
48	23.47317	- 24.38668	21.00759	21.73630	22.43270	48
49	23.69446	24.61630	21.18466	22 ·09863	22.61771	49
50	23.91017	24.83975	21.35693	22.09569	22.79696	50

For explanation see p. (18).

VALUES OF ANNUITIES

Value of an	Annuity Yiel	ding Inte	rest on	Capital	at 3 a	and $3\frac{1}{2}$ PER
CENT., ar	nd Replacing	Capital v	when In	vested a	t Low	er Rates

Yrs.	3 & 2 %	3 & 21/2 %	$3\frac{1}{2}$ & 2%	$3\frac{1}{2}$ & $2\frac{1}{2}\%$	$3\frac{1}{2} & 3 \%$	Yı
51	24.12044	25.05719	21.52456	22.26740	22.97064	5
52	24.32552	25.26882	21.68770	22.42437	23.13894	5
53	24.52548	25.47479	21.84650	22.59657	23'30203	5
54	24.72049	25.67527	22.00110	22.75417	23.46009	5
55	24.91071	25.87041	22'15164	22.90731	23.61327	5
56	25.09626	26.06038	22.29825	23.05612	23.76173	5
57	25.27729	26.24531	22.44105	23.20076	23.90563	5
58	25.45392	26.42536	22.58016	23.34134	24.04212	5
59	25.62628	26.60065	22.71569	23.47800	24.18033	2
50	25.79449	26.77133	22.84776	23.61086	24.31140	5
ÓΙ	25.95866	26.93751		1	1	6
2	26.11801	27.09935	22.97647	23·74003 23·86563	24.43847	6
3	26.27535	27.25694	23.22423	23.98777	24.26167 24.68111	6
54	26.42807	27 23094	23.34346	24.10626	24.79691	6
55	26.57719	27.55988	23.45973	24.22209	24 79091	6
						6
66	26.72280	27.70545	23.57311	24.33446	25.01807	
7	26.86500	27.84723	23.68369	24.44377	25.12365	
8	27.00387	27.98533	23.79155	24.55012	25.22603	9
9	27.13951	28.11985	23.89677	24.65358	25.32532	0
70	27.27200	28.25089	23.99943	24.75424	25.42160	7
71	27.40142	28.37853	24.09960	24.85219	25.21498	1
72	27.52786	28.50289	24.19720	24.94751	25.60554	17
73	27.65140	28.62403	24.29275	25.04027	25.69338	1
74	27.77210	28.74206	24.38587	25.13024	25.77857	17
75	27.89005	28.85705	24.47676	25.21840	25.86120	12
76	28.00531	28.96908	24.56549	25:30392	25.94135	
77	28.11795	29.07825	24.65212	25.38717	26.01910	
78	28.22805	29.18461	24.73670	25.46821	26.09451	
79	28.33565	29.28826	24.81930	25.24710	26.16766	1
30	28.44084	29.38925	24.89996	25.62391	26.23863	8
31	28.54366	29.48767	24.97874	25.69869	26.30747	18
32	28.64418	29.58357	25.05568	25.77151	26.37425	18
33	28.74245	29.67704	25.13085	25.84241	26.43905	k
34	28.83854	29.76812	25.20427	25.91145	26.20191	
35	28.93249	29.85689	25.27601	25 98104	26.56289	H
36	29.02436	29.94341	25.34609	26.04416	26.62206	l
37	29 02430	30.02773	25.41458	26.10792	26.67946	1
38	29.20206	30.10991	25.48120	26.17003	26.73516	
39	29.28798	30.10005	25.54689	26.23052	26.78920	
90	29.37201	30.56800	25.61081	26.28944	26.84163	
	- 0.					-11
91	29.45420	30'34420	25.67327	26.34683	26·89251 26·94187	K
92	29.53460	30.41838	25.73433	26:40274		9
93	29.61324	30.49069	25.79402	26:45720	26.98977	
94	29.69017	30.56117	25.85236	26·51025 26·56194	27.03025	
95	29.76543		25.90940			
96	29.83905	30.69686	25.96517	26.61229	27.12512	
97	29.91108	30.76216	26.01970	26.66135	27.16759	
98	29.98156	30.82582	26.07301	26.70916	27.20880	K
99	30.05052	30.88787	26.12515	26.75573	27.24880	9
001	30.11299	30.94837	26.17613	26.80111	27.28761	I

Value of an Annuity Yielding Interest on Capital at 4 PER CENT., and Replacing Capital when Invested at

Years	2%	$2\frac{1}{2}\%$	3 %	3½%	Years
1	.96153	•96153	.96153	.96153	I
2	1.86898	1.87326	1.87754	1.88182	2
3	2.72662	2.73870	2.75080	2.76294	3
4	3·53827 4·30740	3.26103	3.58388	3.60684 4.41538	4
5		4'34316			5
6	5.03713 5.73026	5.08777	5.13881	5.19027	6
7 8	6.38938	5.79725 6.47386	5·86488 6·55925	5.93315 6.64555	7 8
9	7.01678	7.11962	7.22367	7.32891	9
ıó	7.61514	7.73641	7.85975	7.98458	10
11	8.18478	8.32598	8.46902	8.61390	II
12	8.72908	8.88990	9.05288	9.21562	12
13	9.24912	9.42967	9.61265	9.79801	13
14	9.74640	9.94663	10.14952	10.32213	14
15	10.22229	10.44207	10.66478	10.89027	15
16	10.67804	10.91715	11.15936	11.40448	16
17	11.11483	11.37297	11.63433	11.89865	17
18	11.53374	11.81022	12.09063	12.37366	18
19	11.93577	12.23083	12.52915	12.83033	19
20	12.32184	12.63470	12.95073	13.26945	20
21	12.69281	13.02298	13.35617	13.69177	21
22	13.04948	13.39646	13.74620	14.09799	22
23	13·39260 13·72286	13.75584 14.10182	14.12152	14.48880	23
25	14.04091	14 43503	14.48280	15.22672	24
26	14.34736	14.75606	15.16569		26
27	14 64277	15.06549	15.48846	15.57501	27
28	14.92767	15.36383	15.79948	16.23307	28
29	15.20257	15.65159	16.09926	16.54387	29
30	15.46792	15.92924	16.38827	16.84315	30
31	15.72417	16.19722	16.66696	17.13138	31
32	15.97173	16.45594	16.93577	17.40901	32
33	16.51099	16.70582	17.19509	17.67646	33
34	16.44232	16.94721	17.44532	17.93411	34
35	16.66605	17.18048	17.68681	18.18236	35
36	16.88252	17:40597	17.91993	18.42158	36
37	17.09204	17.62397	18.14499	18.65211	37
38	17:29488	17.83481	18.36232	18.87428	38
39 40	17°49134 17°68167	18.03877 18.23612	18·57222 18·77498	19·08843 19·29486	39
41	17.86611		1		1
42	18.04491	18:42711 18:61201	18.97086	19°49385 19°68571	4I 42
43	18.21828	18.79103	19 10014	19.87068	43
44	18.38643	18.96440	19.51987	20.00000	44
45	18.54957	19.13234	19.69078	20.22104	45
46	18.70788	19.29505	19.85603	20.38691	46
47	18.86154	19.45272	20.01580	20.54688	47
48	19.01074	19.60554	20.17032	20.70116	48
49	19.15563	19.79522	20.31978	20.84998	49
50	19.29637	19.89731	20.46434	20.99354	50

For explanation see p. (18).

VALUES OF ANNUITIES

Value of an Annuity Yielding Interest on Capital at 4 PER CENT., and Replacing Capital when Invested at

Years	2 %	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	Years
51	19.43311	20.03658	20.60419	21.13201	51
52	19.56599	20.17364	20.73949	21.26535	52
53	19.69515	20:30271	20.87042	21.39449	53
54	19.82072	20.42985	20.99712	21.51884	54
55	19.94281	20.55321	21.11974	21.63883	55
56	20.06156	20.67293	21.23842	21.75460	56
57	20.17707	20.78914	21.35331	21.86631	57
58	20.28946	20.90194	21.47867	21.97411	58
59	20.39882	21.01146	21.57221	22.07814	59
60	20.50526	21.11781	21.67648	22.17854	60
61	20.60887	21.22108	21.77744	22.27544	61
62	20.70975	21:32139	21.87521	22.36896	62
63	20.80798	21.41882	21.96990	22.45923	63
64	20.90364	21.51348	22.06161	22.54635	64
65	20.99683	21.60544	22.15045	22.63045	
66	21.08760	21.69480	22.23650	22.71163	65
67	21.17602	21 09486	22.31987	22.78999	
68	21.26224	21.86605			67
		21 94808	22.40064	22.86563	68
69	21.34624		22.47891	22.93866	69
70	21.42812	22.02783	22.55472	23.00916	70
71	21.50794	22.10536	22.62819	23.07722	71
72	21.58576	22.18074	22.69939	23.14293	72
73	21.66164	22.25403	22.76839	23.20638	73
74	21.73565	22.32530	22.83527	23.26763	74
75	21.80783	22.39462	22.90008	23.32677	75
76	21.87824	22°46204	22.96291	23.38388	76
77	21.94693	22.52761	23.02380	23.43902	77
78	22.01394	22.59140	23.08283	23.49226	78
79	22.07933	22.65345	23.14006	23.54367	79
79 80	22.14314	22.71383	23.19553	23.29331	79 80
81	22.20542	22.77257	23.24932	23.64125	81
82	22.26620	22.82973	23.30146	23.68755	82
83	22:32555	22.88535	23.35202	23.73225	83
84	22.38348	22.93947	23.40105	23.77542	84
85	22.44003	22.99215	23.44852	23.81711	85
86	22.49526	23'04342	23.49468	23.85737	86
87	22.54918	23.09333	23.53937	23.89626	87
88	22.60185	23.14101	23.58272	23.93381	88
89	22.65329	23.18919	23.62476	23.97008	89
90	22.70353	23.23523	23.66552	24.00210	90
91	22.75260	23.28005	23.70506	24.03893	91
92	22.80055	23.32369	23.74341	24.07160	92
93	22.84739	23.36618	23.78061	24.10316	93
93	22.89315	23.40755	23.81668	24.13364	93
95	22.93787	23.44784	23.85168	24.16307	95
96	22.98157	23.48707	23.88562	24.19121	96
97	23.02427	23.52528	23.91854	24.51897	97
98	23.06601	23.56249	23.95049	24.24549	98
99	23.10680	23.59873	23.98147	24.27112	99
100	23.14668	23.63403	24.01123	24.29586	100
-00	23 14000	23 03403	24 01133	24 29300	100

Value of an Annuity Yielding Interest on Capital at $4\frac{1}{2}$ PER CENT. and Replacing Capital when Invested at

Years	2 °/ _°	2½°/。	3 °/。	3½°/。	Years
1	·95694	·95694	·95694	·95694	1
2	1·85168	1·85588	1·86008	1·86428	2
3	2·68995	2·70170	2·71348	2·72528	3
4	3·47676	3·49873	3·52079	3·54294	4
5	4·21659	4·25085	4·28532	4·32000	5
6	4.91338	4·96155	5.01008	5.05898	6
7	5.57066	5·63395	5.69780	5.76221	7
8	6.19157	6·27088	6.35096	6.43183	8
9	6.77895	6·87489	6.97185	7.06984	9
10	7.33533	7·44830	7.56255	7.67805	10
11	7·86300	7·99322	8·12497	8·25819	11
12	8·36403	8·51157	8·66085	8·81182	12
13	8·84030	9·00509	9·17183	9·34042	13
14	9·29351	9·47539	9·65938	9·84536	14
15	9·72522	9·92394	10·12488	10·32790	15
16	10·13683	10·35208	10·56961	10·78925	16
17	10·52966	10·76105	10·99475	11·23051	17
18	10·90488	11·15199	11·40138	11·65272	18
19	11·26357	11·52597	11·79052	12·05686	19
20	11·60676	11·88395	12·16312	12·44383	20
21	11.93534	12·22683	12·52006	12.81450	21
22	12.25018	12·55546	12·86217	13.16967	22
23	12.55207	12·87061	13·19019	13.51008	23
24	12.84173	13·17301	13·50486	13.83646	24
25	13.11984	13·46331	13·80684	14.14947	25
26	13·38702	13.74216	14·09676	14·44974	26
27	13·64385	14.01014	14·37521	14·73787	27
28	13·89088	14.26779	14·64274	15·01442	28
29	14·12861	14.51563	14·89987	15·27992	29
30	14·35752	14.75413	15·14709	15·53487	30
31	14·57804	14·98374	15·38487	15·77974	31
32	14·79058	15·20489	15·61362	16·01499	32
33	14·99553	15·41797	15·83378	16·24104	33
34	15·19326	15·62335	16·04571	16·45829	34
35	15·38408	15·82139	16·24978	16·66713	35
36	15·56836	16·01241	16.44634	16·86791	36
37	15·74635	16·19672	16.63572	17·06099	37
38	15·91835	16·37462	16.81822	17·24669	38
39	16·08463	16·54639	16.99413	17·42532	39
40	16·24544	16·71228	17.16373	17·59718	40
41	16·40100	16·87255	17·32730	17·76255	41
42	16·55155	17·02743	17·48506	17·92170	42
43	16·69730	17·17715	17·63727	18·07488	43
44	16·83844	17·32191	17·78415	18·22234	44
45	16·97516	17·46191	17·92591	18·36432	45
46	17·10764	17.59734	18·06275	18·50102	46
47	17·23605	17.72839	18·19488	18·63266	47
48	17·36056	17.85523	18·32248	18·75945	48
49	17·48131	17.97802	18·44571	. 18·88158	49
50	17·59844	18.09691	18·56476	18·99923	50

For explanation see p. (18).

VALUES OF ANNUITIES

Value of an Annuity Yielding Interest on Capital at 41 PER CENT., and Replacing Capital when Invested at 3½°/ 2½°/ Years Vears 19.11258 51 51 18-21205 18.67978 17.71211 52 52 17.82242 18.79092 19.22179 18.32359 53 18-43165 18.89834 53 17.92953 19:32703 54 18.03353 19.42845 54 18.53637 19.00217 55 55 18.13455 18.63787 19.10254 19.52620 56 56 18.23268 18.73627 19.19958 19.62042 57 57 18.32804 18.83167 19.29342 19.71125 18.42073 19·79880 19·88322 58 19.38417 58 18.92418 59 59 18.51083 19.01391 19.47195 60 60 19.96461 18.59843 19.10096 19.55686 61 61 20.04310 18.68363 19.18541 19.63900 62 18.76650 19.26735 19.71848 62 20.11878 63 63 18.84713 19.34689 19.79539 20.19177 19.86981 64 64 19.42388 20.26216 18.92558 65 19.94185 20.33005 65 19.00193 19:49902 66 66 20.01157 20.39555 19.07624 19.57178 67 19.64243 67 19.14859 20.07906 20.45872 68 68 19.21904 19.71104 20.14440 20.51966 69 19.77768 20.57845 69 19.28765 20.20766 20.26892 20.63517 70 19.84240 70 19:35447 71 20.32824 20.68990 71 19.90529 19.41956 72 20.38568 20.74270 72 19.48299 19.96639 73 73 20.44132 20.79365 19.54479 20.02576 20.84282 74 74 19.60501 20.08346 20.49520 75 20.89026 75 19.66372 20.13953 20.54740 20.93605 76 76 20.59796 20.19404 19.72094 77 77 20.98024 20.64695 19.77673 20.24703 78 19.83113 20.29854 21.02289 78 20.69440 79 20·74039 20·78494 21.06405 79 19.88418 20.34862 21.10377 80 80 20.39732 19.93592 81 20.44468 20.82812 21.14212 81 19.98639 20.86996 21.17914 82 82 20.49074 20.03562 20.53553 83 20.08366 83 20.91051 21.21487 20.94981 21.24936 84 84 20.57910 20.13052 85 21.28265 20.98790 85 20.17626 20.62155 86 21.31480 86 20.22089 20.66272 21.02482 87 20.26445 20.70284 21.06060 21.34583 87 21.37579 88 21.09530 88 20.30698 20.74187 20·77986 20·81681 89 21.12893 21.40471 89 20.34848 21.43264 90 21.16153 90 20.38901 91 21.45960 20.85278 91 20.42859 21.19314 92 92 20.88779 21.22379 21.48563 20.46723 93 20.92186 21.51077 93 20.50496 21.25350 94 21.53504 94 20.95502 21.28231 20.54182 21.55848 95 95 20.57782 20.98730 21.31025 96 21.58111 96 21.01873 21.33734 20.61298 97 21.60296 97 20.64733 21.04932 21.36361 98 21.62406 98 20.68089 21.07911 21.38909

21.41380

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21.10810

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Value of an Annuity Yielding Interest on Capital at 5 PER CENT., and Replacing Capital when Invested at

Years	2%	$2\frac{1}{2}\%$	3 %	$3\frac{1}{2}\%$	Years
ı	.95238	·95238	95238	•95238	I
2	1.83469	1.83882	1.84294	1.84706	2
3	2.65425	2.66570	2.67716	2.68865	3
4	3.41736	3.43858	3.45988	3.48127	4
5	4.12953	4.16239	4.19543	4.22866	5
6	4.79557	4.84145	4.88764	4.93417	6
7 8	5.41970	5.47959	5.53997	5.60085	7 8
8	6.00565	6.08024	6.15550	6.23144	8
9	6.55671	6.64642	6.73701	6.82846	9
10	7.07581	7.18088	7.28701	7.39419	10
II	7.56556	7.68604	7.80778	7.93072	II
12	8.02828	8.16412	8.30137	8.43996	12
13	8.46608	8.61710	8.76996	8.92367	13
14	8.88083	9.04678	9.21435	9.38344	14
15	9.27425	9.45478	9.63701	9.82076	15
16	9.64784	9.84262	10.03907	10.23700	16
17	10.00302	10.51191	10.42182	10.63342	17
18	10.34104	10.26300	10.78647	11.01112	18
19	10.66305	10.89792	11.13414	11.37135	10
20	10.97011	11.21740	11.46582	11.71495	20
21	11.26319	11.52242	11.78248	12.04288	21
22	11.54316	11.81382	12.08497	12.35604	22
23	11.81082	12.09243	12.37411	12.65521	23
24	12.06693	12.35898	12.65063	12.94116	24
25	12.31217	12.61417	12.91524	13.21457	25
26	12.54717	12.85864	13.16858	13.47611	26
27	12.77252	13.09297	13.41126	13.72638	27
28	12.98875	13.31772	13.64382	13.96596	28
29	13.19638	13.23340	13.86680	14.19539	29
30	13.39586	13.74048	14.08069	14.41518	30
31	13.58763	13.93942	14.28593	14.62578	31
32	13.77209	14.13511	14.48297	14.82766	32
33	13.94962	14.31447	14.67220	15.02123	33
34	14.12057	14.49134	14.85399	15.20689	34
35	14.28526	14.66156	15.02871	15.38201	35
36	14.44401	14.82546	15.19669	15.55593	36
37	14.59709	14.98332	15.35824	15.72000	37
38	14.74479	15.13544	15.21362	15.87752	38
39	14.88734	15.28207	15.66321	16.02879	39
40	15.02500	15.42347	15.80718	16.17409	40
41	15.15797	15.55988	15.94581	16.31369	41
42	15.28648	15.69150	16.07932	16.44783	42
43	15.41071	15.81856	16.20792	16.57677	43
44	15.53086	15.94124	16.33190	16.70071	44
45	15.64710	16.05974	16.45138	16.81989	45
46	15.75950	16.17423	16.56657	16.93449	46
47	16.86850	16.28487	16.67764	17.04472	47
47 48	15.97397	16.39183	16.78478	17.15076	48
49	16.07615	16.55328	16.88814	17.25278	49
50	16.17515	16.59532	16.98788	17.35096	50

For explanation see p. (18).

VALUES OF ANNUITIES

and Replacing Capital when Invested at							
Years	2 %	2 ½ %	3 %	$3\frac{1}{2}\%$	Years		
51	16·27113	16.69206	17.08414	17:44544	51		
52	16·36418	16.78572	17.17706	17:53639	52		
53	16·45443	16.87635	17.26677	17:62394	53		
54	16·54198	16.96411	17.35340	17:70824	54		
55	16·62693	17.04908	17.43707	17:78941	55		
56	16·70940	17·13138	17·51789	17.86757	56		
57	16·78945	17·21110	17·59599	17.94287	57		
58	16·86720	17·28834	17·67144	18.01538	58		
59	16·94271	17·36320	17·74436	18.08526	59		
60	17·01607	17·43576	17·81485	18.15257	60		
61	17·08736	17·50610	17·88298	18·21743	61		
62	17·15667	17·57430	17·94886	18·27993	62		
63	17·22401	17·64045	18·01256	18·34017	63		
64	17·28951	17·70460	18·07416	18·39822	64		
65	17·35320	17·76683	18·13374	18·45418	65		
66	17.41516	17·82722	18·19138	18·50813	66		
67	17.47544	17·88583	18·24713	18·56013	67		
68	17.53410	17·94269	18·30108	18·61028	68		
69	17.59119	17·99789	18·35328	18·65862	69		
70	17.64675	18·05148	18·40379	18·70524	70		
71	17·70085	18·10351	18·45268	18·75020	71		
72	17·75353	18·15404	18·50000	18·79355	72		
73	17·80483	18·20311	18·54581	18·83537	73		
74	17·85480	18·25077	18·59015	18·87570	74		
75	17·90347	18·29706	18·63309	18·91461	75		
76	17·95090	18·34204	18·67466	18·95213	76		
77	17·99711	18·38574	18·71492	18·98834	77		
78	18·04215	18·42821	18·75390	19·02326	78		
79	18·08605	18·46948	18·79166	19·05696	79		
80	18·12885	18·50959	18·82823	19·08947	80		
81	18·17057	18·54858	18·86365	19·12084	81		
82	18·21125	18·58648	18·89796	19·15112	82		
83	18·25093	18·62333	18·93120	19·18033	83		
84	18·28961	18·65916	18·96341	19·20851	84		
85	18·32738	18·69400	18·99461	19·23572	85		
86	18·36419	18·72788	19·02485	19·26197	86		
87	18·40011	18·76083	19·05414	19·28731	87		
88	18·43516	18·79288	19·08254	19·31177	88		
89	18·46937	18·82405	19·11005	19·33537	89		
90	18·50275	18·85438	19·13671	19·35816	90		
91	18·53533	18.88388	19·16257	19·38014	91		
92	18·56714	18.91258	19·18762	19·40138	92		
93	18·59819	18.94051	19·21190	19·42187	93		
94	18·62850	18.96768	19·23544	19·44166	94		
95	18·65810	18.99413	19·25826	19·46076	95		
96 97 98 99	18.68700 18.71523 18.74280 18.76972	19.01986 19.04491 19.06929	19·28038 19·30183 19·32262 19·34279	19·47919 19·49700 19·51418 19·53078	96 97 98		

Value of an Annuity Yielding Interest on Capital at 6 PER CENT., and Replacing Capital when Invested at								
Years	2%	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	4%	Years		
I	.94340	*94340	.94340	*94340	.94340	I		
2	1.80164	1.80562	1.80959	1.81357	1.81753	2		
3	2.28562	2.59648	2.60736	2.61825	2.62916	3		
4	3.30443	3'32427	3.34418	3.36416	3.38421	4		
5	3.96577	3.99605	4.02649	4.05711	4.08786	5		
6	4.57611	4.61787	4.65988	4.70216	4.74469	6		
7	5.14107	5.19494	5.24918	5.30380	5°35 ⁸ 77	7 8		
8	5.66543	5.73174	5.79858	5.86589	5.93373	8		
9	6.15328	6.23220	6.31178	6.39198	6.47279	9		
10	6.60825	6.69976	6.79205	6.88511	6.97881	10		
II	7.03344	7.13745	7.24234	7.34797	7.45440	II		
12	7.43163	7.54791	7.66507	7.78307	7.90189	12		
13	7.80530	7.93349	8.06257	8.19256	8.32335	13		
14	8.15647	8.29628	8.43697	8.57846	8.72075	14		
15	8.48716	8.63811	8.78990	8.94254	9.09579	15		
16	8.79894	8.96065	9.12317	9.28634	9.45001	16		
17	9.09339	9.26544	9.43814	9.61141	9.78483	17		
18	9.37189	9.55384	9.73624	9.91896	10.10175	18		
19	9.63558	9.82704	10.01863	10.51033	10.40161	19		
20	9.88562	10.08603	10.28637	10.48647	10.68582	20		
21	10.12200	10.33197	10.54052	10.74841	10.95530	21		
22	10.34865	10.26269	10.78202	10.99723	11.51089	22		
23	10.26323	10.78795	11.0112	11.23356	11.45357	23		
24	10.76762	10.99953	11.53005	11.45830	11.68402	24		
25	10.96239	11.50155	11.43798	11.67215	11.90306	25		
26	11.14840	11.39367	11.63630	11.87578	12.11138	26		
27	11.32593	11.57716	11.82536	12.06971	12.30936	27		
28	11.49557	11.75254	12.00281	12.25445	12.49797	28		
29	11.65786	11.92023	12.17805	12.43085	12.67748	29		
30	11.81335	12.08065	12.34278	12.59906	12.84852	30		
31	11.96229	12.23406	12.50016	12.75966	13.01152	31		
32	12.10493	12.38114	12.65070	12.91289	13.16673	32		
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13.06523

13.19192

13.31345

13.43021

13.24206

13.64964

14.12729

14·52095 14·84803

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13.96024

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14.17977

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For explanation see p. (18).

VALUES OF ANNUITIES

Value of an	Annuity	Yielding	Interes	t on	Capital	at 7	PER	CENT.,
	and Re	placing	Capital '	when	Invest	ed at		

Year	2 %	$2\frac{1}{2}\%$	3%	$3\frac{1}{2}\%$	4%	Years
1	°93458	93458	°93458	93458	93458	1
2	1°76976	1.77359	1°77743	1.78126	1.78509	2
3	2°52045	2.53077	2°54110	2.55145	2.56181	3
4	3°19873	3.21732	3°23596	3.25467	3.27343	4
5	3°81449	3.84250	3°87064	3.89892	3.92731	5
6 7 8 9	4.37587 4.88969 5.36167 5.79660 6.19863	4.41404 4.93839 5.42102 5.86658 6.27908	4.45240 4.98738 5.48077 5.93704 6.36007	4'49099 5'03667 5'54087 6'00795 6'44160	4.52977 5.08621 5.60136 6.07929 6.52354	6 7 8 9
11	6·57125	6.66196	6.75324	6.84500	6.93727	11
12	6·91754	7.01818	7.11936	7.22105	7.32322	12
13	7·24019	7.35035	7.46102	7.57220	7.68380	13
14	7·54136	7.66072	7.78053	7.90070	8.02124	14
15	7·82320	7.95127	8.07970	8.20850	8.33743	15
16	8.08734	8·22376	8·36044	8·49726	8.63409	16
17	8.33542	8·47975	8·62418	8·76862	8.91273	17
18	8.56883	8·72068	8·87241	9·02389	9.17490	18
19	8.78874	8·94775	9·10631	9·26441	9.42161	19
20	8.99628	9·16196	9·32697	9·49118	9.65419	20
21	9.19244	9.36444	9.53543	9·70525	9.87362	21
22	9.37814	9.55603	9.73264	9·90766	10.08075	22
23	9.55402	9.73748	9.91926	10·09967	10.27654	23
24	9.72091	9.90953	10.09622	10·28035	10.46167	24
25	9.87937	10.07293	10.26399	10·45216	10.63694	25
26 27 28 29 30	10.03019 10.17366 10.31034 10.44070 10.56524	10·22830 10·37592 10·51657 10·65065 10·77853	10.42340 10.57485 10.71892 10.85600 10.98672	10.61515 10.76983 10.91667 11.05644 11.18931	10.80299 10.96023 11.10951 11.38563	26 27 28 29 30
31	10.68422	10.90049	11.11123	11·31580	11.51344	31
32	10.79785	11.01710	11.23002	11·43615	11.63481	32
33	10.90667	11.12855	11.34353	11·55108	11.75033	33
34	11.01091	11.23507	11.45187	11·66045	11.86029	34
35	11.11086	11.33723	11.55548	11·76498	11.96501	35
36	11·20662	11.43498	11.65447	11·86465	12.06462	36
37	11·29854	11.52857	11.74922	11·95986	12.15953	37
33	11·38680	11.61845	11.84006	12·05081	12.25010	38
39	11·47171	11.70467	11.92691	12·13769	12.33639	39
40	11·55321	11.78745	12.01028	12·22091	12.41881	40
45	11.91753	12·15554	12·37854	12·58606	12.77759	45
50	12.22150	12·45982	12.67974	12·88095	13.06336	50
55	12.47770	12·71391	12·92842	13·12112	13.29239	55
60	12.69551	12·92775	13·13491	13·31753	13.47673	60
65	12.88228	13·10874	13·30743	13·47927	13.62583	65
70	13.04325	13.26313	13.45225	13.61267	13.74665	70
75	13.18305	13.39513	13.57441	13.72326	13.84485	75
80	13.30477	13.50877	13.67765	13.81502	13.92486	80
90	13.50512	13.69150	13.83968	13.95518	14.04337	90
100	13.66064	13.82896	13.95732	14.05304	14.12270	100

COMPOUND INTEREST TABLES

Value of an Annuity Yielding Interest on Capital at 7½ PER CENT., and Replacing Capital when Invested at									
Years	2 %	2½%	3 %	$3\frac{1}{2}\%$	4%	Year			
1	°93023	°93023	·93023	.93023	93023	1 2 3 4 5			
2	I °75424	1°75800	1·76177	1.76554	1 76930				
3	2°48908	2°49914	2·50922	2.51931	2 52941				
4	3°14838	3°16638	3·18444	3.20255	3 22072				
5	3°74310	3°77007	3·79716	3.82437	3 85168				
6 7 8 9	4.28218 4.77300 5.22169 5.63333 6.01229	4.31872 4.81939 5.27796 5.69940 6.08794	4°35544 4°86604 5°33459 5°76588 6°16405	4.39236 4.91294 5.39150 5.83274 6.24060	4'42944 4'96007 5'44876 5'89995 6'31748	6 7 8 9			
11	6·36221	6.44720	6·53266	6.61848	6.70471	11			
12	6·68628	6.78026	6·87465	6.96942	7.06454	12			
13	6·98724	7.08979	7·19269	7.29597	7.39952	13			
14	7·26734	7.37811	7·48918	7.60046	7.71194	14			
15	7·52870	7.64725	7·76597	7.88488	8.00378	15			
16	7.77303	7·89896	8.02497	8·15096	8·27678	16			
17	8.00192	8·13484	8.26768	8·40033	8·53250	17			
18	8.21679	8·35631	8.49553	8·63431	8·77247	18			
19	8.41876	8·56458	8.70974	8·85426	8·99774	19			
20	8.60904	8·76063	8.91139	9·06117	9·20963	20			
21	8·78850	8·94558	9·10150	9·25609	9:40911	21			
22	8·95809	9·12026	9·28100	9·44002	9:59702	22			
23	9·11843	9·28540	9·45054	9·61363	9:77431	23			
24	9·27033	9·44171	9·61104	9·77775	9:94164	24			
25	9·41433	9·68991	9·76296	9·93305	10:09979	25			
26	9.55119	9.73066	9·90707	10.08014	10°24937	26			
27	9.68120	9.86417	10·04379	10.21952	10°39080	27			
28	9.80488	9.99121	10·17366	10.35165	10°52488	28			
29	9.92270	10.11214	10·29707	10.47724	10°65190	29			
30	10.03512	10.22735	10·41461	10.59648	10°77238	30			
31	10·14240	10·33709	10.52643	10·70985	10.88672	31			
32	10·24475	10·44190	10.63298	10·81759	10.99519	32			
33	10·34265	10·54196	10.73468	10·92037	11.09829	33			
34	10·43634	10·63751	10.83165	11·01807	11.19633	34			
35	10·52609	10·72904	10.92431	11·11136	11.28961	35			
36	10.61199	10.81654	11.01273	11·20022	11·37825	36			
37	10.69439	10.90025	11.09730	11·28503	11·46263	37			
38	10.77342	10.98056	11.17831	11·36596	11·54308	38			
39	10.84940	11.05754	11.25568	11·44322	11·61967	39			
40	10.92228	11.13139	11.32990	11·51715	11·69276	40			
45	11.24733	11.45909	11.65705	11.84091	12.01028	45			
50	11.51769	11.72910	11.92378	12.10156	12.26242	50			
55	11.74495	11.95400	12.14344	12.31330	12.46401	55			
60	11.93773	12.14285	12.32544	12.48611	12.62594	60			
65	12.10273	12.30239	12.47723	12.62818	12.75673	65			
70 75 80 90	12·24470 12·36782 12·47489 12·65086	12.43828 12.55430 12.65406 12.81427 12.93460	12.60446 12.71165 12.80213 12.94398 13.04683	12.74519 12.84208 12.92240 13.04495 13.13042	12.86256 12.94850 13.01846 13.12198 13.19122	70 75 80 90			

For explanation see p. (18).

VALUES OF ANNUITIES

V	Value of an Annuity Yielding Interest on Capital at 8 PER CENT., and Replacing Capital when invested at						
Years	2 %	2½%	3%	$3\frac{1}{2}\%$	4 %	Years	
1	*92593	°92593	*92593	*92593	*92593	1	
2	1.73898	1°74269	1.74639	1*75009	1.75378	2	
3	2.45848	2°46830	2.47813	2*48797	2.49782	3	
4	3.09958	3°11703	3.13453	3*15208	3.16967	4	
5	3.67434	3°70032	3.72641	3*75261	3.77890	5	
6 7 8 9	4·19242 4·66174 5·08883 5·47900 5·83683	4·22744 4·70599 5·14226 5·54149 5·90811	4.26261 4.75046 5.19599 5.60431 5.97975	4°29797 4°79515 5°24998 5°66745 6°05177	4.33347 4.84004 5.30425 5.73089 6.12404	6 7 8 9	
11	6·16606	6·24586	6·32603	6·40648	6.48723	11	
12	6·46998	6·55794	6·64620	6·73473	6.82352	12	
13	6·75137	6·84706	6·94300	7·03918	7.13552	13	
14	7·01252	7·11561	7·21886	7·32220	7.42561	14	
15	7·25558	7·36563	7·47569	7·58581	7.69580	15	
16	7·48223	7·59884	7.71539	7·83177	7.94786	16	
17	7·69408	7·81690	7.93947	8·06172	8.18337	17	
18	7·89253	8·02118	8.14936	8·27698	8.40386	18	
19	8·07872	8·21288	8.34627	8·47889	8.61037	19	
20	8·25375	8·39299	8.53126	8·66844	8.80421	20	
21	8·41857	8·56260	8.70534	8.84666	8·98634	21	
22	8·57405	8·72250	8.86941	9.01453	9·15759	22	
23	8·72083	8·87343	9.02413	9.17271	9·31888	23	
24	8·85967	9·01607	9.17036	9.32201	9·47086	24	
25	8·99111	9·15114	9.30856	9.46307	9·61428	25	
26	9°11585	9·27919	9.43948	9.59647	9.74972	26	
27	9°23421	9·40053	9.56352	9.72271	9.87762	27	
23	9°34667	9·51583	9.68120	9.84223	9.99870	28	
29	9°45367	9·62547	9.79288	9.95570	10.11327	29	
30	9°55566	9·72980	9.89913	10.06330	10.22181	30	
31	9.65288	9.82907	10.00010	10·16549	10·32471	31	
32	9.74554	9.92379	10.09622	10·26252	10·42220	32	
33	9.83410	10.01412	10.18786	10·35497	10·51480	33	
34	9.91877	10.10030	10.27517	10·44277	10·60277	34	
35	9.99980	10.18278	10.35851	10·52654	10·68639	35	
36 37 38 39 40	10.07729 10.15156 10.22275 10.35668	10·26157 10·33688 10·40908 10·47823 10·54452	10.43798 10.51392 10.58660 10.65598 10.72248	10.60625 10.68228 10.75477 10.82392 10.89004	10·76577 10·84128 10·91322 10·98165 11·04692	36 37 38 39 40	
45	10.64849	10.83811	11.01504	11.17905	11·32990	45	
50	10.89052	11.07935	11.25290	11.41110	11·55402	50	
55	10.09348	11.27981	11.44833	11.59918	11·73282	55	
60	10.26532	11.44780	11.60995	11.75240	11·87620	60	
65	11.41214	11.58950	11.74453	11.87818	11·99185	65	
70 75 80 90	11.53828 11.64755 11.74246 11.89825 12.01880	11.71001 11.81279 11.90108 12.04268 12.14890	11.85719 11.95200 12.03196 12.15717 12.24785	11 ·98 164 12 ·06724 12 ·13813 12 ·24620 12 ·32149	12·08532 12·16116 12·22285 12·31406 12·37501	70 75 80 90 100	

Value of an Annuity Yielding Interest on Capital at 9 PER CENT., and Replacing Capital when Invested at								
Ye ars	2 %	2 ½%	3%	31/2%	4%	Year		
ı	*91743	·91743	'91743	91743	.91743	1		
2	1.70926	1.71284	1.71641	1.71999	1.72356	2		
3	2.39949	2.40884	2.41820	2.42757	2.43695	3		
4	3.00640	3.02281	3.03926	3.05576	3.07229	4		
5	3.24411	3.56828	3.26223	3.61689	3.64130	5		
6	4.02372	4.05597	4.08834	4.12086	4.12348	6		
7	4.45411	4.49448	4.53502	4.57574	4.61659	7 8		
8	4.84240	4.89076	4.93935	4.98810	5.03707			
9	5.19440	5.25053	5.30690	5.36348	5.42026	10		
10	5.21493	5.24852	5.64235	5.70643	5.77064	1		
II	5.80794	5.87869	5.94965	6.02076	6.09203	11		
12	6.07681	6.12434	6.23201	6.30979	6.38765	12		
13	6.32439	6.40828	6.49224	6·57626 6·82263	6.66027	13		
14	6.55299	6.64293	6.73283		6.91233	14		
15	6.76476	6.86031	6.95570	7.05094		15		
16	6.96136	7.06220	7.16276	7.26296	7.36269			
17	7.14439	7.25016	7:35548	7.46029	7.56435	17		
18	7:31518	7.42556	7.53529	7·64427 7·81616	7.75236	10		
19	7.47485 7.62445	7.58956	7·70333 7·86065	7.97696	8.09179	20		
20			8.00820		8.24538	21		
21	7.76488	7.88724	8.14684	8·12764 8·26911	8.38933	22		
22	7.89696	8·02272 8·15023	8.27719	8.40202	8.52450	23		
23	8.02130 8.13862	8.27041	8.40004	8.52711	8.65149	24		
24 25	8.24940	8.38392	8.51586	8.64499	8.77101	25		
26	8.35429	8.49127	8.62530	8.75618	8.88360	26		
27	8.45359	8.59276	8.72875	8.86116	8.98965	27		
28	8.54774	8.68900	8.82667	8.96033	9.08983	28		
29	8.63715	8.78033	8.91941	9.05428	9.18442	29		
30	8.72220	8.86706	9.00747	9.14319	9.27386	30		
31	8.80313	8.94943	9.09099	9.22748	9.35848	31		
32	8.88013	9.02788	9.17036	9.30735	9.43850	32		
33	8.95359	9.10258	9.24590	9.38333	9.51439	33		
34	9.02372	9.17372	9.31775	9.45537	9.58635	34		
35	9.09074	9.24172	9.38623	9.52399	9 65465	35		
36	9.15474	9.30657	9'45144	9.58917	9.71540	36		
37	9.21600	9.36847	9.21366	9.(5134	9.78061	37		
38	9.27463	9.42774	9.27313	9.71044	9.83942	38		
39	9.33088	9.48443	9.62983	9.76677	9.89501	39		
40	9.38474	9.53871	9.68410	9.82058	9.94797	40		
45	9.62371	9.77833	9'92211	10.05500	10.17687	45		
50	9.82096	9.97427	10.11470	10.24233	10.35733	50		
55 60	9.98572	10.13644	10.72232	10·39361 10·5164 6	10.50078	55 60		
65	10.12474	10.38583	10.21016	10.61706	10.70778	65		
_			10.60029	10.69965	10.78225	70		
70	10:34468	10.48251	10.67600	10.76786	10.84258	75		
75 80	10.43242	10.63536	10.73975	10.82427	10.89159	80		
90	10.63309	10 03330	10.83940	10.01012	10.96392	90		
100	10.72927	10.83283	10.91143	10.96984	11.01225	100		

VALUES OF ANNUITIES

Value of an	Annuity Yielding Interest on Capital at 10 PER CENT.,
	and Replacing Capital when Invested at

Years	2 %	$2\frac{1}{2}\%$	3 %	$3\frac{1}{2}\%$	4 %	Year
I	.90909	*90909	•90909	*90909	.90909	I
2	1.68053	1.68399	1.68745	1.69090	1.69435	2
3	2.34326	2.35218	5.39111	2.37004	2.37898	3
4	2.91865	2.93412	2.94962	2.96515	2.98071	4
5	3.42281	3°44534	3.46795	3.49063	3.21337	5
6	3.86808	3.89788	3.92776	3.95776	3.98785	6
7 8	4.26417	4.30112	4.33828	4.37533	4.41287	7 8
	4.61875	4.66272	4.70686	4.75111	4.79552	1
9	4.93791	4.98860	5.03946	5.09046	5.14157	9
10	5.22668	5.28377	5.34100	5.39837	5.45580	10
II	5.48914	5.55229	5.61555	5.67885	5.74221	II
12	5.72869	5.79754	5.86641	5.93528	6.00413	12
13	5.94820	6.02236	6.09645	6.17048	6.24438	13
14	6.14999	6.55613	6.30811	6.38688	6.46542	14
15	6.33613	6.41989	6.50335	6.58653	6.66929	15
16	6.50830	6.59635	6.68400	6.77117	6.85777	15
17	6.66800	6.76005	6.85152	6.94237	7.03240	17
18	6.81654	6.91228	7.00727	7.10142	7.19461	18
19	6.95497	7.05418	7.15236	7.24953	7:34543	19
20	7.08431	7.18664	7.28778	7.38765	7.48604	20
21	7.20539	7.31064	7.41444	7.21671	7.61731	21
22	7.31898	7.42688	7.23313	7.63755	7.74000	22
23	7.42567	7.53602	7 64444	7.75080	7.85491	23
24	7.52610	7.63866	7.74911	7.85713	7.96261	24
25	7.62073	7.73539	7.84757	7.95710	8.06374	25
26	7.71016	7.82669	7.94042	8.05121	8.15880	26
27	7.79466	7.91283	8.02800	8.13988	8.24817	27
28	7.87464	7.99437	8.11026	8 22348	8.33243	28
29	7.95045	8.07161	8.18900	8.30254	8.41184	29
30	8.02246	8.14485	8.26317	8.37724	8.48680	30
31	8.09088	8.21429	8.33340	8.44794	8.55761	31
32	8.15587	8.28534	8.40004	8.51484	8.62448	32
33	8.21781	8.34314	8.46339	8.57839	8.68780	33
34	8.27684	8.40287	8.52355	8.63856	8.74776	34
35	8.33320	8.45988	8.58082	8.69580	8.80460	35
35	8.38694	8.51419	8.63528	8.75013	8.85842	36
37 38	8.43832	8.56597	8.68719	8.80181	8.90948	37
	8.48745	8.61549	8.73675	8.85097	8.95801	38
39	8.53454	8.66281	8.78395	8.89775	9.00406	39
40	8.57957	8.70807	8.82909	8.94238	9.04787	40
45	8.77886	8.90734	9.02649	9.13634	9.23685	45
50	8.94270	9.06964	9.18561	9.29074	9.38526	50
55 60	9.07909	9.20353	9.31541	9.41504	9.50290	55
	9.19388	9.31506	9.42214	9.51574	9.59674	60
65	9.29144	9.40867	9.51059	9.59803	9.67211	65
70	9.37488	9.48794	9.58433	9.66548	9.73283	70
75 80	9.44688	9.55530	9.64618	9.72110	9.78196	75
	9.50923	9.61298	9.69819	9.76706	9.82183	80
90	9.61113	9.70516	9.77938	9·83691 9·88543	9.88064 9.91985	100
100	9.68964	9.77402	9.83797	9 00 543	9 91905	100

COMPOUND INTEREST TABLES

Va	a	nd Replacing	Capital wh	capital at 1 en Invested	at	1
Years	2 °/。	$2\frac{1}{2}$ $^{\circ}/_{\circ}$	3 °/。	$3\frac{1}{2}$ $^{\circ}/_{\circ}$	4 °/。	Years
1	·90090	•90090	*90090	.90090	•90090	1
2	1·65276	1•65610	1*65945	1.66279	1•66612	2
3	2·28961	2•29813	2*30664	2.31517	2•32370	3
4	2·83588	2•85048	2*86511	2.87976	2•89444	4
5	3·30952	3•33059	3*35172	3.37289	3•39412	5
6	3.72404	3.75164	3.77933	3.80708	3·83492	6
7	4.08978	4.12379	4.15789	4.19209	4·22637	7
8	4.41482	4.45499	4.49526	4.53563	4·57608	8
9	4.70554	4.75157	4.79768	4.84388	4·89014	9
10	4.96706	5.01860	5.07021	5.12187	5·17355	10
11	5·20351	5·26022	5·31696	5·37369	5·43038	11
12	5·41830	5·47984	5·54133	5·60274	5·66405	12
13	5·61424	5·68026	5·74615	5·81187	5·87738	13
14	5·79368	5·86385	5·93379	6·00346	6·07279	14
15	5·95857	6·03258	6·10625	6·17951	6·25230	15
16	6·11060	6·18816	6·26524	6·34176	6·41766	16
17	6·25118	6·33201	6·41221	6·49169	6·57037	17
18	6·38154	6·46537	6·54842	6·63056	6·71171	18
19	6·50272	6·58932	6·67495	6·75948	6·84282	19
20	6·61565	6·70479	6·79275	6·87942	6·96467	20
21	6.72112	6.81257	6·90266	6·99122	7.07814	21
22	6.81982	6.91340	7·00538	7·09562	7.18397	22
23	6.91237	7.00789	7·10157	7·19327	7.28284	23
24	6.99932	7.09659	7·19179	7·28476	7.37535	24
25	7.08113	7.17999	7·27654	7·37061	7.46202	25
26	7·15824	7·25854	7·35628	7·45127	7·54333	26
27	7 23102	7·33262	7·43140	7·52715	7·61971	27
28	7·29982	7·40259	7·50226	7·59863	7·69154	28
29	7·36494	7·46875	7·56918	7·66604	7·75916	29
30	7·42667	7·53139	7·63247	7·72969	7·82288	30
31	7·48523	7·59077	7.69237	7.78984	7·88299	31
32	7·54087	7·64711	7.74914	7.84674	7·93975	32
33	7·59379	7·70064	7.80298	7.90062	7·99338	33
34	7·64416	7·75153	7.85410	7.95168	8·04410	34
35	7·69218	7·79997	7.90268	8.00011	8·09210	35
36	7·73797	7.84612	7·94889	8.04608	8·13757	36
37	7·78169	7.89011	7·99286	8.08975	8·18066	37
38	7·82347	7.93209	8·03475	8.13126	8·22153	38
39	7·86342	7.97218	8·07468	8.17075	8·26031	39
40	7·90166	8.01050	8·11278	8.20834	8·29714	40
45	8.07040	8·17879	8·27916	8·37146	8·45577	45
50	8.20862	8·31545	8·41287	8·50096	8·57999	50
55	8.32339	8·42785	8·52158	8·60487	8·67820	55
60	8.41978	8·52127	8·61082	8·68896	8·75643	60
65	8.50150	8·59959	8·68464	8·75747	8·81911	65
70	8.57136	8.66573	8.74610	8.81361	8.86957	70
75	8.63147	8.72193	8.79755	8.85981	8.91035	75
80	8.68352	8.76993	8.84081	8.89799	8.94342	80
90	8.76839	8.84658	8.90824	8.95593	8.99218	90
100	8.83371	8.90378	8.95683	8.99610	9.02462	100

For explanation see p. (18).

VALUES OF ANNUITIES

Value of an	Annuity Yielding	g Interest on	Capital at 12 PER	CENT.,
	and Replacing	Capital when	Invested at	

Years	2 °/。	2½°/°	3 °/。	3½°/。	4 °/.	Years
1	·89286	·89286	·89286	*89286	*89286	1
2	1·62589	1·62912	1·63236	1*63559	1*63882	2
3	2·23836	2·24650	2·25464	2*26278	2*27093	3
4	2·75768	2·77148	2·78531	2*79915	2*81302	4
5	3·20350	3·22324	3·24302	3*26284	3*28270	5
6	3·59033	3.61598	3.64169	3.66746	3·69328	6
7	3·92909	3.96047	3.99191	4.02342	4·05499	7
8	4·22815	4.26499	4.30188	4.33883	4·37583	8
9	4·49407	4.53603	4.57804	4.62009	4·66216	9
10	4·73201	4.77877	4.82554	4.87231	4·91906	10
11	4·94614	4.99735	5.04853	5.09965	5·15069	11
12	5·13981	5.19515	5.25039	5.30549	5·36043	12
13	5·31580	5.37495	5.43391	5.49265	5·55112	13
14	5·47639	5.53905	5.60141	5.66345	5·72512	14
15	5·62349	5.68937	5.75485	5.81987	5·88439	15
16	5.75871	5.82754	5.89585	5.96357	6·03064	16
17	5.88340	5.95494	6.02582	6.09596	6·16528	17
18	5.99872	6.07275	6.14595	6.21825	6·28957	18
19	6.10569	6.18197	6.25728	6.33151	6·40457	19
20	6.20514	6.28349	6.36069	6.43662	6·51119	20
21	6·29783	6·37807	6·45695	6.53439	6.61025	21
22	6·38442	6·46636	6·54676	6.62550	6.70247	22
23	6·46546	6·54894	6·63069	6.71056	6.78845	23
24	6·54146	6·62634	6·70927	6.79012	6.86875	24
25	6·61286	6·69900	6·78298	6.86464	6.94387	25
26	6.68006	6.76733	6.85221	6.93455	7·01423	26
27	6.74340	6.83168	6.91734	7.00023	7·08022	27
28	6.80320	6.89237	6.97870	7.06201	7·14219	28
29	6.85973	6.94969	7.03657	7.12021	7·20046	29
30	6.91324	7.00390	7.09123	7.17508	7·25531	30
31	6.96397	7.05522	7·14291	7·22687	7·30699	31
32	7.01210	7.10387	7·19183	7·27582	7·35572	32
33	7.05783	7.15004	7·23819	7·32212	7 40173	33
34	7.10133	7.19390	7·28216	7·36596	7·44520	34
35	7.14274	7.23560	7·32390	7·40750	7·48630	35
36	7·18221	7·27529	7·36356	7·44689	7·52520	36
37	7·21986	7·31310	7·40129	7·48429	7·56203	37
38	7·25581	7·34915	7·43719	7·51981	7·59694	38
39	7·29016	7·38355	7·47139	7·55357	7·63004	39
40	7·32301	7·41640	7·50399	7·58568	7·66146	40
45	7·46772	7·56044	7.64613	7.72479	7·79651	45
50	7·58592	7·67707	7.76003	7.83492	7·90200	50
55	7·68383	7·77277	7.85243	7.92310	7·98523	55
60	7·76591	7·85217	7.92814	7.99433	8·05141	60
65	7·83538	7·91862	7.99068	8.05229	8·10437	65
70	7·89468	7·97466	8·04268	8·09973	8·14697	70
75	7·94565	8·02223	8·08617	8·13874	8·18136	75
80	7·98973	8·06282	8·12270	8·17094	8·20923	80
90	8·06152	8·12756	8·17959	8·21978	8·25030	90
100	8·11670	8·17582	8·22053	8·25360	8·27760	100

Value of an	Annuity Yielding Interest on Capital at 13 PER and Replacing Capital when Invested at	CENT.,

		d Replacing	Capital whe			,
Years	2 °/。	$2rac{1}{2}$ $^{\circ}/_{\circ}$	3 °/。	$3rac{1}{2}$ $^{\circ}/_{\circ}$	4 °/。	Years
1	•88496	•88496	·88496	·88496	·88496	1
2	1•59987	1•60301	1·60614	1·60927	1·61239	2
3	2•18936	2•19714	2·20492	2·21271	2·22050	3
4	2•68367	2•69674	2·70983	2·72293	2·73605	4
5	3•10405	3•12259	3·14115	3·15974	3·17837	5
6	3·46589	3·48979	3·51373	3.53772	3·56174	6
7	3·78055	3·80959	3·83868	3.86781	3·89697	7
8	4·05663	4·09053	4·12445	4.15841	4·19238	8
9	4·30079	4·33921	4·37763	4.41606	4·45448	9
10	4·51821	4·56082	4·60340	4.64595	4·68843	10
11	4.71303	4.75950	4·80590	4.85220	4·89838	11
12	4.88855	4.93859	4·98847	5.03819	5·08771	12
13	5.04749	5.10078	5·15385	5.20666	5·25918	13
14	5.19205	5.24834	5·30430	5.35990	5·41509	14
15	5.32409	5.38310	5·44169	5.49979	5·55737	15
16	5·44514	5.50664	5·56759	5.62794	5.68764	16
17	5·55649	5.62026	5·68335	5.74570	5.80725	17
18	5·65924	5.72508	5·79010	5.85422	5.91739	18
19	5·75434	5.82206	5·88880	5.95450	6.01907	19
20	5·84260	5.91201	5·98030	6.04737	6.11315	20
21	5.92471	5.99565	6.06532	6·13359	6·20039	21
22	6.00127	6.07361	6.14449	6·21380	6·28145	22
23	6.07282	6.14642	6.21837	6·28856	6·35691	23
24	6.13982	6.21455	6.28743	6·35838	6·42728	24
25	6.20269	6.27841	6.35212	6·42368	6·49300	25
26	6·26177	6·33839	6·41279	6·48486	6.55448	26
27	6·31740	6·39481	6·46985	6·54226	6.61207	27
28	6·36985	6·44795	6·52345	6 59619	6.66609	28
29	6·41938	6·49809	6·57399	6·64693	6.71682	29
30	6·46622	6·54545	6·62167	6·69473	6.76452	30
31	6·51057	6.59026	6.6667 1	6·73980	6.80942	31
32	6·55262	6.63269	6.70931	6·78235	6.85173	32
33	6·59254	6.67292	6.74964	6·82257	6.89163	33
34	6·63048	6.71111	6.78785	6·86061	6.92930	34
35	6·66657	6.74738	6.82411	6·89663	6.96489	35
36	6·70094	6.78189	6.85853	6.93077	6·99854	36
37	6·73370	6.81473	6.89125	6.96315	7·03039	37
38	6·76496	6.84603	6.92236	6.99388	7·06056	38
39	6·79481	6.87587	6.95198	7.02308	7·08914	39
40	6·82334	6.90435	6.98020	7.05083	7·11625	40
45	6·94881	7·02901	7·10302	7·17085	7·23262	45
50	7·05103	7·12972	7·20121	7·26566	7·32331	50
55	7·13555	7·21219	7·28072	7·34143	7·39474	55
60	7·20627	7·28049	7·34576	7·40255	7·45146	60
65	7·26606	7·33758	7·39942	7·45222	7·49680	65
70	7·31702	7·38568	7·44399	7·49283	7·53324	70
75	7·36078	7·42646	7·48122	7·52620	7·56264	75
80	7·39860	7·46124	7·51248	7·55373	7·58644	80
90	7·46012	7· 51664	7·56112	7·59545	7·62150	90
100	7·50735	7·55790	7·5960)	7·62432	7·64479	100

For explanation see p. (18).

VALUES OF ANNUITIES

Value of an	Annuity Yielding	g Interest on	Capital at 14	PER CENT.,
	and Replacing	Capital when	Invested at	

		d Replacing				1
Years	2 °/ _°	$2rac{1}{2}$ $^{\circ}/_{\circ}$	3 °/ _°	$3\frac{1}{2}$ $^{\circ}/_{\circ}$	4 °/。	Years
1	·87719	·87719	·87719	·87719	·87719	1
2	1·57468	1·57772	1·58075	1·58378	1·58681	2
3	2·14245	2·14990	2·15736	2·16481	2·17227	3
4	2·61353	2·62593	2·63833	2·65075	2·66319	4
5	3·01061	3·02804	3·04549	3·06296	3·08046	5
6 7 8 9	3·34979 3·64283 3·89849 4·12345 4·32289	3·37211 3·66979 3·92978 4·15875 4·36188	3·39450 3·69677 3·96108 4·19404 4·40082	3.41684 3.72378 3.99239 4.22930 4.43968	3:43924 3:75080 4:02369 4:26452 4:47846	6 7 8 9 10
11	4·50090	4.54327	4·58553	4.62766	4.66965	11
12	4·66071	4.70617	4·75145	4.79653	4.84139	12
13	4·80496	4.85323	4·90125	4.94899	4.99641	13
14	4·93579	4.98662	5·03711	5.08723	5.13693	14
15	5·05496	5.10813	5·16085	5.21308	5.26479	15
16	5·16395	5.21923	5·27396	5·32808	5·38155	16
17	5·26399	5.32119	5·37772	5·43351	5·48852	17
18	5·35613	5.41506	5·47319	5·53046	5·58680	18
19	5·44124	5.50174	5·56131	5·61986	5·67735	19
20	5·52008	5 58200	5·64284	5·70252	5·76097	20
21	5.59332	5.65651	5.71848	5.77912	5.83839	21
22	5.66151	5.72585	5.78880	5.85028	5.91021	22
23	5.72514	5.79051	5.85432	5.91650	5.97696	23
24	5.78466	5.85094	5.91550	5.97826	6.03913	24
25	5.84042	5.90751	5.97272	6.03595	6.09712	25
26	5·89278	5.96059	6·02634	6.08993	6·15130	26
27	5·94201	6.01045	6·07666	6.14053	6·20199	27
28	5·98839	6.05738	6·12395	6.18802	6·24949	28
29	6·03215	6.10161	6·16847	6.23265	6·29406	29
30	6·07349	6.14335	6·21044	6.27465	6·33593	30
31	6·11261	6·18280	6·25004	6·31423	6·37530	31
32	6·14965	6·22013	6·28746	6·35157	6·41237	32
33	6·18481	6·25550	6·32287	6·38682	6·44730	33
34	6·21818	6·28904	6·35639	6·42015	6·48026	34
35	6·24991	6·32089	6·38817	6·45168	6·51138	35
36	6·28011	6·35116	6·41834	6.48155	6·54078	36
37	6·30888	6·37996	6·44697	6.50986	6·56859	37
38	6·33631	6·40738	6·47420	6.53671	6·59492	38
39	6·36249	6·43351	6·50010	6.56221	6·61985	39
40	6·38750	6·45844	6·52476	6.58643	6·64348	40
45	6·49732	6·56739	6.63195	6.69105	6.74480	45
50	6·58661	6·65522	6.71747	6.77352	6.82361	50
55	6·66030	6·72702	6.78661	6.83933	6.88557	55
60	6·72188	6·78641	6.84308	6.89234	6.93472	60
65	6·77386	6·83599	6.88962	6.93538	6.97398	65
70	6.81814	6.87772	6·92825	6.97054	7.00550	70
75	6.85612	6.91307	6·96049	6.99941	7.03091	75
80	6.88892	6.94319	6·98755	7.02322	7.05149	80
90	6.94223	6.99114	7·02960	7.05926	7.08176	90
100	6.98311	7.02682	7·05982	7.08420	7.10187	100

COMPOUND INTEREST TABLES

Vai		nuity Yieldin id Replacing				NT.,
Years	2 °/ _°	2½°/。	3 °/。	3 ½ °/。	4 °/ _°	Years
1	·86957	·86957	·86957	·86957	*86957	1
2	1·55027	1·55321	1·55615	1·55909	1*56202	2
3	2·09751	2·10466	2·11180	2·11894	2*12608	3
4	2·54697	2·55874	2·57052	2·58230	2*59410	4
5	2·92262	2·93904	2·95548	2·97193	2*98840	5
6	3·24122	3·26211	3 28302	3·30395	3·32489	6
7	3·51479	3·53988	3·56498	3·59009	3·61520	7
8	3·75221	3·78119	3·81016	3·83912	3·86806	8
9	3·96015	3·99270	4·02522	4·05768	4·09010	9
10	4·14376	4·17958	4·21531	4·25095	4·28649	10
11	4·30704	4·34582	4·38448	4·42298	4·46132	11
12	4·45316	4·49464	4·53593	4·57700	4·61782	12
13	4·58467	4·62860	4·67225	4·71561	4·75865	13
14	4·70363	4·74977	4·79556	4·84096	4·88594	14
15	4·81173	4·85988	4·90758	4·95479	5·00147	15
16	4.91038	4.96034	5.00974	5.05856	5·10673	16
17	5.00075	5.05235	5.10328	5.15349	5·20295	17
18	5.08383	5.13690	5.18918	5.24063	5·29119	18
19	5.16044	5.21484	5.26832	5.32084	5·37234	19
20	5.23131	5.28689	5.34143	5.39488	5·44716	20
21	5·29704	5·35368	5·40915	5·46339	5.51632	21
22	5·35816	5·41575	5·47203	5·52694	5.58039	22
23	5·41512	5·47356	5·53055	5·58601	5.63986	23
24	5·46833	5·52752	5·58511	5·64102	5.69519	24
25	5·51814	5·57799	5·63609	5·69236	5.74673	25
26	5.56485	5.62528	5.68381	5.74035	5.79483	26
27	5.60874	5.66968	5.72855	5.78528	.5 83981	27
28	5.65005	5.71142	5.77057	5.82742	5.88190	28
29	5.68898	5.75072	5.81008	5.86698	5.92137	29
30	5.72574	5.78779	5.84729	5.90419	5.95841	30
31	5.76049	5·82279	5.88239	5.93922	5·99322	31
32	5.79339	5·85589	5.91553	5.97224	6·02596	32
33	5.82457	5·88722	5.94685	6.00339	6·05680	33
34	5.85416	5·91692	5.97650	6.03283	6·08583	34
35	5.88228	5·94511	6.00459	6.06067	6·11332	35
36	5·90902	5.97188	6.03123	6.08701	6·13923	36
37	5·93448	5 99733	6.05651	6.11197	6·16372	37
38	5·95875	6.02155	6.08053	6.13564	6·18690	38
39	5·98190	6.04463	6.10337	6.15810	6·20883	39
40	6·00400	6.06663	6.12511	6.17943	6·22962	40
45	6·10092	6·16266	6·21948	6·27142	6·31862	45
50	6·17958	6·23994	6·29463	6·34382	6·38773	50
55	6·24440	6·30301	6·35530	6·40151	6·44200	55
60	6·29850	6·35512	6·40480	6·44793	6·48501	60
65	6·34412	6·39858	6·44555	6·48558	6 51932	65
70	6·38294	6·43513	6·47934	6·51632	6·54686	70
75	6·41622	6·46606	6·50754	6·54154	6·56905	75
80	6·44493	6·49241	6·53118	6·56233	6·58700	80
90	6·49157	6·53432	6·56790	6·59379	6·61342	90
100	6·52730	6·56548	6·59428	6·61554	6·63095	100

For explanation see p. (18).

YIELD FROM PERPETUITY

The Percentage per Annum which each Number of Years' Purchase of a Perpetuity allows the Purchaser

Years	PER CENT.	PER ANNUM	Years
1 2 3 4 5	£ 100 50 33'3 25 20	£ s. d. 100 0 0 50 0 0 33 6 8 25 0 0 20 0 0 16 13 4	1 2 3 4 5
7	14·2857	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7
8	12·5		8
9	11·1		9
10	10		10
11	9 ° 69	9 I 9 ³ / ₄	11
12	8 · 3	8 6 8	12
13	7 · 6923 ° 6	7 I3 I0 ¹ / ₄	13
14	7 · 1428 ° 5	7 2 I0 ¹ / ₄	14
15	6 · 6	6 I3 4	15
16	6.25	6 5 0	16
17	5.88235	5 17 7 ³ / ₄	17
18	5.5	5 11 1 ¹ / ₄	18
19	5.26316	5 5 3 ¹ / ₄	19
20	5	5 0 0	20
21	4·7619	4 15 2 ³ / ₄ 4 10 11 4 6 11 ¹ / ₂ 4 3 4 4 0 0	21
22	4·5		22
23	4·3478		23
24	4·16		24
25	4		25
26	3.84615	3 16 11	26
27	3.70	3 14 1	27
28	3.5714	3 11 5 ¹ / ₄	28
29	3.4483	3 8 11 ¹ / ₂	29
30	3.3	3 6 8	30
31	3:2258	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	31
32	3:125		32
33	3:03		33
34	2:9412		34
35	2:85714		35
36	2.7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	36
37	2.70		37
38	2.6316		38
39	2.56410		39
40	2.5		40
41	2·4390	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	41
42	2·38095		42
43	2·32558		43
44	2·27		44
45	2·2		45
46	2·17391	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	46
47	2·12766		47
48	2·083		48
49	2·0408		49
50	2·0		50

For explanation see p. (19).

COMPOUND INTEREST TABLES

At per	Cent.		£	At p	er Cent.		£
$\frac{1}{8}$,,	£ s. 0 2 0 5 0 7 0 10	d. 6 0 6 0	800.00000 400.00000 266.66667 200.00000	5\frac{1}{8} \text{ or } 5\frac{1}{4} \text{ ''} \ 5\frac{3}{8} \text{ ''} \ 5\frac{2}{2} \text{ ''}	£ s. 5 2 5 5 5 7 5 10	d. 6 0 6	19·51220 19·04762 18·60465 18·18182
$\frac{3}{4}$,,	0 12 0 15 0 17 1 0	6 0 6 0	160 00000 133 33333 114 28571 100 00000	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5 12 5 15 5 17 6 0	6 0 6 0	17·77778 17·39130 17·02128 16·66667
	1 2 1 5 1 7 1 10	6 0 6 0	88.88889 80.00000 72.72727 66.66667	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6 2 6 5 6 7 6 10	6 0 6 0	16·32653 16·00000 15·68627 15·38462
[$\frac{3}{4}$,,	1 12 1 15 1 17 2 0	6 0 6 0	61·53846 57·14286 53·33333 50·00000	6 ⁵ / ₈ ,, 6 ³ / ₈ ,, 7 ,,	6 12 6 15 6 17 7 0	6 0 6 0	15°09434 14°81481 14°54545 14°28571
2_{4}^{2} ,,	2 2 2 5 2 7 2 10	6 0 6 0	47.05882 44.44444 42.10526 40.00000	$7\frac{1}{8}$,, $7\frac{1}{4}$,, $7\frac{1}{8}$,, $7\frac{1}{2}$,,	7 2 7 5 7 7 7 10	6 0 6 0	14.03509 13.79310 13.55932 13.33333
$2\frac{3}{4}$,,	2 12 2 15 2 17 3 0	6 0 6 0	38·09524 36·36364 34·78261 33·33333	7 ⁵ / ₈ ,, 7 ³ / ₄ ,, 7 ⁷ / ₈ ,, 8 ,,	7 12 7 15 7 17 8 0	6 0 6 0	13°11475 12°90323 12°69841 12°50000
34 ,,	3 2 3 5 3 7 3 10	6 0 6 0	32·00000 30·76923 29·62963 28·57143	8½ ,, 8¼ ,, 8½ ,, 8½ ,,	8 2 8 5 8 7 8 10	6 0 6 0	12·30769 12·12121 11·94030
$3\frac{3}{4}$,, $3\frac{7}{8}$,,	3 12 3 15 3 17 4 0	6 0 6 0	27·58621 26·66667 25·80645 25·00000	8 ⁵ / ₈ ,, 8 ³ / ₄ ,, 8 ⁷ / ₈ ,, 9 ,,	8 12 8 15 8 17 9 0	6 0 6 0	11·59420 11·42857 11·26761
14 ,, (4 2 4 5 4 7 4 10	6 0 6 0	24.24242 23.52941 22.85714 22.22222	9½ ,, 9¼ ,, 9½ ,, 9½ ,,	9 2 9 5 9 7 9 10	6 0 6 0	10.95890 10.81081 10.66667 10.52632
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4 12 4 15 4 17	6 0 6	21.62162 21.05263 20.51282	9 ⁵ / ₈ ,, 9 ³ / ₄ ,, 9 ⁷ / ₈ ,,	9 12 9 15 9 17	6 0 6	10·38961 10·25641 10·12658

For explanation see p. (19). See also p. (416).

NOMINAL AND EFFECTIVE RATES OF INTEREST

		EFFECTIVE RATE		
Nominal Rate Per Cent. (Annual)	Effective Annu Half-Yearly	Quarterly	t is Convertible Monthly	Nominal Rate Per Cent. (Annual)
1·00	1.0025	1.0038	1·0046	1·00
1·25	1.2539	1.2559	1·2572	1·25
1·50	1.5056	1.5085	1·5104	1·50
1·75	1.7577	1.7615	1·7641	1·75
2·00	2·0100	2.0151	2·0184	2·00
2·25	2·2627	2.2691	2·2733	2·25
2·50	2·5156	2.5235	2·5288	2·50
2·75	2·7689	2.7785	2·7849	2·75
3·00	3·0225	3.0339	3·0416	3·00
3·25	3·2764	3.2898	3·2989	3·25
3·50	3·5306	3.5462	3·5567	3·50
3·75	3·7852	3.8031	3·8151	3·75
4·00	4·0400	4.0604	4·0742	4·00
4·25	4·2952	4.3182	4·3338	4·25
4·50	4·5506	4.5765	4·5940	4·50
4·75	4·8064	4.8353	4·8548	4·75
5·00	5·0625	5.0945	5·1162	5·00
5·25	5·3189	5.3543	5·3782	5·25
5·50	5·5756	5.6145	5·6408	5·50
5·75	5·8327	5.8752	5·9040	5·75
6·00	6·0900	6·1364	6·1678	6·00
6·25	6·3477	6·3980	6·4322	6·25
6·50	6·6056	6·6602	6·6972	6·50
6·75	6·8639	6·9228	6·9628	6·75
7·00	7·1225	7·1859	7·2290	7·00
7·25	7·3814	7·4495	7·4958	7·25
7·50	7·6406	7·7136	7·7633	7·50
7·75	7·9002	7·9782	8·0313	7·75
8·00	8·1600	8·2432	8·3000	8·00
8·25	8·4202	8·5088	8·5692	8·25
8·50	8·6806	8·7748	8·8391	8·50
8·75	8·9414	9·0413	9·1096	8·75
9·00	9·2025	9·3083	9·3807	9·00
9·25	9·4639	9·5758	9·6524	9·25
9·50	9·7256	9·8438	9·9248	9·50
9·75	9·9877	10·1123	10·1977	9·75
10	10·2500	10·3813	10·4713	10
11	11·3025	11·4621	11·5719	11
12	12·3600	12·5509	12·6825	12
13	13·4225	13·6476	13·8032	13
14	14·4900	14.7523	14·9342	14
15	15·5625	15.8650	16·0755	15
20	21·0000	21.5506	21·9391	20
30	32·2500	33.5469	34·4889	30
40	44.0000	46·4100	48·2126	40
60	69.0000	74·9006	79·5856	60
80	96.0000	107·3600	116·9425	80
100	125.0000	144·1406	161·3035	100

For explanation see pp. (19, 20).

COMPOUND INTEREST TABLES

Effective Rate	Nomina	l Annual Rate when I is Convertible	interest	Effective Rate	
per Cent. (Annual)	Half-yearly	Quarterly	Monthly	per Cent. (Annual	
1.00	•9975	•9963	•9954	1.00	
1.25	1.2461	1.2442	1.2429	1.25	
1.50	1.4944	1.4916	1.4898	1.50	
1.75	1.7424	1.7386	1.7361	1.75	
2.00	1.9901	1.9852	1.9819	2.00	
2.25	2.2375	2.2313	2.2271	2.25	
2.50	2.4846	2.4769	2.4718	2.50	
2.75	2.7313	2.7221	2.7159	2.75	
3.00	2.9778	2.9668	2.9595	3.00	
3.25	3.2240	3.2111	3.2026	3.25	
3.50	3.4699	3.4550	3.4451	3.50	
3.75	3.7155	3.6984	3.6871	3.75	
4.00	3.9608	3.9414	3.9285	4.00	
4.25	4.2058	4.1839	4.1694	4.25	
4.50	4.4505	4.4260	4.4098	4.50	
4.75	4.6949	4.6677	4.6496	4.75	
5.00	4.9390	4.9089	4.8889	5.00	
5.25	5.1828	5.1497	5.1278	5.25	
5.50	5 4264	5.3901	5.3660	5.50	
5.75	5.6696	5.6300	5.6038	5.75	
6.00	5.9126	5.8695	5.8411	6.00	
6.25	6.1553	6.1086	6.0778	6.25	
6.50	6.3977	6.3473	6.3140	6.50	
6-75	6.6398	6.5856	6.5498	6.75	
7.00	6.8816	6.8234	6.7850	7.00	
7.25	7.1232	7.0608	7.0197	7.25	
7.50	7.3644	7.2978	7.2539	7.50	
7.75	7.6054	7.5344	7.4876	7.75	
8.00	7.8461	7.7706	7.7208	8.00	
8.25	8.0865	8.0064	7.9536	8.25	
8.50	8.3267	8.2418	8.1858	8.50	
8.75	8.5665	8.4767	8.4175	8.75	
9.00	8.8061	8.7113	8.6488	9.00	
9.25	9.0455	8.9454	8.8796	9.25	
9.50	9.2845	9.1792	9.1098	9.50	
9.75	9.233	9.4125	9.3396	9.75	
10	9.7618	9.6455	9.5690	10	
11 12	10.7131	10.5733	10.4815	11	
13	11.6601	11.4949	11.3866	12 13	
		12.4104	12.2842		
14 15	13.5416	13.3198	13.1746	14	
20	14.4761	14.2232	14.0579	15 20	
30	19·0890 " 28·0351	18.6541	18.3714	30	
		27.1160	26.5253		
40 60	36.6432	35.1029	34.1234	40	
80	52.9822	49.8731	47.9329	60 80	
100	68·3282 82·8427	63·3169 75·6828	60.2420	100	

For explanation see pp. (19, 20). (208)

Constant Factors for Converting Values and Amounts of Yearly Annuities into those of Annuities for One Year Payable HALF-YEARLY, QUARTERLY, AND MONTHLY

Yearly Rates	Half-yearly Factors	Quarterly Factors	Monthly Factors	Yearly Rates
·oı	1.00249	1.00377	1.00460	·OI
.0122	1.00315	1.00469	1.00572	.0125
.012	1.00374	1.00563	1.00682	.012
.0172	1.00436	1.00656	1.00799	.0175
.02	1.00497	1.00747	1.00914	. 02
.0222	1.00229	1.00841	I '01027	0225
.022	1.00651	1.00033	1.01142	.025
.0275	1.00683	1.01052	1.01254	.0275
.03	1.00744	1.01118	1.01368	.03
.0322	1.00800	1.01511	1.01482	.0325
.032	1.00867	1.01303	1.01594	.035
·0375	1.00929	1.01392	1.01202	.0375
·04	1.00990	1.01488	1.01820	.04
.045	1.01113	1.01672	1.02046	.045
.02	1.01235	1.01826	1.02271	.05
.06	1.01478	I .02223	1.02721	.00
.07	1.01720	1.02588	1.03169	.07
·08	1.01961	1.02952	1.03616	·08
.00	1.02201	1.03314	1.04061	.00
·10	I .02440	1.03676	1.04504	.10

Value of Annuity for Twenty-five Years at 4 PER CENT.

Annuity Payable	Interest Convertible					
Auntity Fayable	Yearly	Half-yearly	Quarterly	Monthly		
Yearly	15.62208	15.55624	15.52282	15.20032		
Half-yearly	15.77677	15.71180	15.67883	15.65665		
Quarterly	15.85449	15.78998	15.75722	15.73520		
Monthly	15.90645	15.84223	15.80963	15.78771		

The Present Value of 1 due a Year hence (v), and the Discount on 1 for One Year (d) corresponding to Various Rates of Interest (i)

i	$v = \frac{1}{1+i}$	d=1-v	i	$v = \frac{1}{1+i}$	d=1-v
*01	990099010	*009900990	°03	970873786	°029126214
*0125	987654321	*012345679	°035	966183575	°033816425
*015	985221675	*014778325	°04	961538462	°038461538
*0175	982800983	*017199017	°045	956937799	°043062201
°02	980392157	019607843	*05	·952380952	*047619048
°0225	977995110	022004890	*06	·943396226	*056603774
°025	975609756	024390244	*08	·925925926	*074074074
°0275	973236010	026763990	*10	·909090909	*090909091

For explanation see pp. (20, 21).

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Per Cent.	Years	ONE 1	POUND	ONE POUND	PER ANNUM	Years
Per Cent.	rears	Amount	Present Value	Amount	Present Value	T CWIS
20	$ \begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	1·20000 1·44000 1·72800 2·07360 2·48832	·83333 ·69444 ·57870 ·48225 ·40188	1.00000 2.20000 3.64000 5.36800 7.44160	·83333 1·52778 2·10648 2·58873 2·99061	1 2 3 4 5
25	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	1.25000 1.56250 1.95313 2.44141 3.05176	·80000 ·64000 ·51200 ·40960 ·32768	1.00000 2.25000 3.81250 5.76563 8.20703	•80000 1•44000 1•95200 2•36160 2•68928	1 2 3 4 5
30	\begin{cases} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	1·30000 1·69000 2·19700 2·85610 3·71293	.76923 .59172 .45517 .35013 .26933	1.00000 2.30000 3.99000 6.18700 9.04310	.76923 1.36095 1.81611 2.16624 2.43557	1 2 3 4 5
35	\begin{cases} 1 & 2 & \\ 3 & 4 & \\ 5 & \end{cases}	1·35000 1·82250 2·46038 3·32151 4·48403	*74074 *54870 *40644 *30107 *22301	1.00000 2.35000 4.17250 6.63288 9.95438	•74074 1•28944 1•69588 1•99695 2•21996	1 2 3 4 5
40	\begin{cases} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	1·40000 1·96000 2·74400 3·84160 5·37824	•71429 •51020 •36443 •26031 •18593	1.00000 2.40000 4.36000 7.10400 10.94560	·71429 1·22449 1·58892 1·84923 2·03516	1 2 3 4 5
45	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	1.45000 2.10250 3.04863 4.42051 6.40973	•68966 •47562 •32802 •22622 •15601	1.00000 2.45000 4.55250 7.60113 12.02163	·68966 1·16528 1·49330 1·71951 1·87553	1 2 3 4 5
50	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	1·50000 2·25000 3·37500 5·06250 7·59375	•66667 •44444 •29630 •19753 •13169	1.00000 2.50000 4.75000 8.12500 13.18750	·66667 I·IIIII I·40741 I·60494 I·73663	1 2 3 4 5
55	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	1·55000 2·40250 3·72388 5·77201 8·94661	•64516 •41623 •26854 •17325 •11177	1.00000 2.55000 4.95250 8.67638 14.44838	•64516 1•06139 1•32993 1•50318 1•61496	1 2 3 4 5
60	\begin{cases} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	1.60000 2.56000 4.09600 6.55360 10.48576	·62500 ·39063 ·24414 ·15259 ·09537	1.00000 2.60000 5.16000 9.25600 15.80960	·62500 1·01563 1·25977 1·41235 1·50772	1 2 3 4 5
65	\begin{cases} \begin{cases} 1 & \\ 2 & \\ 3 & \\ 4 & \\ 5 & \end{cases} \end{cases}	1.65000 2.72250 4.49213 7.41201 12.22981	•60606 •36731 •22261 •13492 •08177	1.00000 2.65000 5.37250 9.86463 17.27663	•60606 •97337 1•19598 1•33090 1•41267	1 2 3 4 5

For explanation see pp. (25-28).

Per Cent.	Years	PAYM	ENT TO D	ISCHARGE NTEREST		£100	Years
Cent.		Annual	Half-Yearly	Quarterly	Monthly	Weekly	
20	\begin{cases} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	120·000 65·455 47·473 38·629 33·438	57·143 31·169 22·606 18·395 15·923	27·907 15·222 11·040 8·983 7·776	9·160 4·997 3·624 2·949 2·553	2·102 1·146 ·831 ·677 ·586	1 2 3 4 5
25	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	125.000 69.444 51.230 42.344 37.185	58·824 32·680 24·108 19·927 17·499	28·571 15·873 11·710 9·679 8·499	9·346 5·192 3·830 3·166 2·780	2·141 1·190 ·878 ·725 ·637	1 2 3 4 5
30	$\begin{cases} I \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	130·000 73·478 55·063 46·163 41·058	60·465 34·176 25·611 21·471 19·097	29·213 16·512 12·374 10·374 9·227	9·524 5·383 4·034 3·382 3·008	2·179 1·232 ·923 ·774 ·688	1 2 3 4 5
35	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	135.000 77.553 58.966 50.076 45.046	62·069 35·657 27·111 23·024 20·711	29·834 17·139 13·031 11·067 9·955	9.695 5.569 4.235 3.596 3.235	2·216 1·273 ·968 ·822 ·739	1 2 3 4 5
40	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	140·000 81·667 62·936 54·077 49·136	63.636 37.121 28.607 24.580 22.335	30·435 17·754 13·682 11·756 10·682	9·859 5·751 4·432 3·808 3·460	2·251 1·313 1·012 ·869 ·790	1 2 3 4 5
45	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	145.000 85.816 66.966 58.156 53.318	65·169 38·569 30·097 26·138 23·963	31·016 18·356 14·324 12·440 11·405	10·017 5·929 4·626 4·018 3·683	2·284 1·352 1·055 ·916 ·840	1 2 3 4 5
50	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	150.000 90.000 71.053 62.308 57.583	66.667 40.000 31.579 27.692 25.592	31·579 18·947 14·958 13·117 12·123	10·169 6·102 4·817 4·224 3·904	2·317 1·390 1·097 ·962 ·889	1 2 3 4 5
55	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	155.000 94.216 75.192 66.526 61.921	68·132 41·413 33·051 29·242 27·218	32·124 19·527 15·584 13·788 12·833	10·316 6·271 5·004 4·428 4·121	2·348 1·427 1·139 1·008 ·938	1 2 3 4 5
60	\begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	160·000 98·462 79·380 70·804 66·325	69·565 42·809 34·513 30·784 28·837	32.653 20.094 16.200 14.450 13.536	10·458 6·435 5·188 4·628 4·335	2·377 1·463 1·179 1·052 ·986	1 2 3 4 5
65	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	165.000 102.736 83.613 75.137 70.788	70·968 44·187 35·963 32·317 30·447	33·166 20·650 16·807 15·103 14·229	10·594 6·596 5·368 4·824 4·545	2·406 1·498 1·219 1·096 1·032	3 4 5

	Y	ONE P	OUND	ONE POUND	PER ANNUM	Years
Per Cent.	Years	Amount	Present Value	Amount	Present Value	
70	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	1·70000 2·89000 4·91300 8·35210 14·19857	•58824 •34602 •20354 •11973 •07043	1.00000 2.70000 5.59000 10.50300 18.85510	·58824 ·93426 I·13780 I·25753 I·32796	1 2 3 4 5
75	\begin{cases} 1 & 2 & \\ 2 & 3 & \\ 4 & \\ 5 & \end{cases}	1.75000 3.06250 5.35938 9.37891 16.41309	·57143 ·32653 ·18659 ·10662 ·06093	1.00000 2.75000 5.81250 11.17188 20.55078	•57143 •89796 1•08455 1•19117 1•25210	1 2 3 4 5
80	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	1.80000 3.24000 5.83200 10.49760 18.89568	•55556 •30864 •17147 •09526 •05292	1.00000 2.80000 6.04000 11.87200 22.36960	·55556 ·86420 1·03567 1·13093 1·18385	1 2 3 4 5
85	$ \begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	1.85000 3.42250 6.33163 11.71351 21.66999	•54054 •29218 •15794 •08537 •04615	1.00000 2.85000 6.27250 12.60413 24.31763	•54054 •83272 •99066 1•07603 1•12218	1 2 3 4 5
90	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	1.90000 3.61000 6.85900 13.03210 24.76099	•52632 •27701 •14579 •07673 •04039	1.00000 2.90000 6.51000 13.36900 26.40110	•52632 •80332 •94912 1•02585 1•06624	1 2 3 4 5
95	$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{bmatrix}$	1.95000 3.80250 7.41488 14.45901 28.19566	•51282 •26298 •13486 •06916 •03547	1.00000 2.95000 6.75250 14.16738 28.62638	·51282 ·77581 ·91067 ·97983 1·01530	1 2 3 4 5
100	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	2.00000 4.00000 8.00000 16.00000 32.00000	•50000 •25000 •12500 •06250 •03125	1.00000 3.00000 7.00000 15.00000 31.00000	•50000 •75000 •87500 •93750 •96875	1 2 3 4 5
110	\begin{pmatrix} pmatrix	2·10000 4·41000 9·26100 19·44810 40·84101	•47619 •22676 •10798 •05142 •02449	1.00000 3.10000 7.51000 16.77100 36.21910	•47619 •70295 •81093 •86235 •88683	1 2 3 4 5
120	\begin{cases} \b	2·20000 4·84000 10·64800 23·42560 51·53632	*45455 *20661 *09391 04269 01940	1.00000 3.20000 8.04000 18.68800 42.11360	*45455 *66116 *75507 *79776 *81716	1 2 3 4 5
130	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	2·30000 5·29000 12·16700 27·98410 64·36343	*43478 *18904 *08219 *03573 *01554	1.00000 3.30000 8.59000 20.75700 48.74110	•70601 •74174	1 2 3 4 5

For explanation see pp. (25-28).

Per	Years	PAYM		ISCHARGE NTEREST	DEBT OF	£100	Years
Cent.		Annual	Half-Yearly	Quarterly	Monthly	Weekly	10415
70	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	170·000 107·037 87·889 79·521 75·304	72·340 45·548 37·400 33·839 32·044	33.663 21.195 17.404 15.747 14.912	10·726 6·753 5·545 5·017 4·751	2·434 1·532 1·258 1·138 1·078	1 2 3 4 5
75	\begin{cases} \begin{cases} 1 & \\ 2 & \\ 3 & \\ 4 & \\ 5 & \end{cases} \end{cases}	175.000 111.364 92.204 83.951 79.866	73.684 46.890 38.823 35.348 33.628	34·146 21·729 17·991 16·381 15·584	10·853 6·906 5·718 5·206 4·953	2·460 1·566 1·296 1·180 1·123	1 2 3 4 5
80	\begin{cases} \begin{cases} \ 1 \ 2 \ 3 \ 4 \ 5 \end{cases}	180·000 115·714 96·556 88·423 84·470	75.000 48.214 40.232 36.843 35.196	34.615 22.253 18.569 17.004 16.241	10·976 7·056 5·888 5·392 5·151	2·486 1·598 1·334 1·221 1·167	1 2 3 4 5
85	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	185.000 120.088 100.943 92.934 89.112	76·289 49·521 41·626 38·323 36·747	35.071 22.765 19.136 17.618 16.893	11.094 7.202 6.054 5.573 5.344	2·511 1·630 1·370 1·261 1·210	1 2 3 4 5
90	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	190·000 124·483 105·361 97·480 93·788	77.551 50.809 43.004 39.788 38.281	35·514 23·268 19·694 18·221 17·530	7:344 6:216 5:751 5:533	2·535 1·661 1·406 1·301 1·251	1 2 3 4 5
95	\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}	195.000 128.898 109.809 102.058 98.493	78·788 52·080 44·367 41·236 39·795	35.945 23.760 20.241 18.813 18.155	11·321 7·483 6·375 5·925 5·718	2·558 1·691 1·441 1·339 1·292	1 2 3 4 5
100	\begin{pmatrix} \begin{pmatrix} \begin{pmatrix} \begin{pmatrix} \begin{pmatrix} \begin{pmatrix} \begin{pmatrix} \\ 3 \\ 4 \\ 5 \\ \end{pmatrix}	200·000 133·333 114·286 106·667 103·226	80·000 53·333 45·714 42·667 41·290	36·364 24·242 20·779 19·394 18·768	11·429 7·619 6·531 6·095 5·899	2·581 1·720 1·475 1·376 1·332	1 2 3 4 5
110	\begin{cases} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	210·000 142·258 123·316 115·963 112·761	82·353 55·787 48·359 45·476 44·220	37·168 25·178 21·826 20·524 19·958	11.634 7.881 6.832 6.425 6.247	2·623 1·777 1·540 1·449 1·409	1 2 3 4 5
120	\begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	220·000 151·250 132·438 125·351 122·375	84.615 58.173 50.938 48.212 47.067	37.931 26.078 22.834 21.612 21.099	11·828 8·132 7·120 6·739 6·579	2.663 1.831 1.603 1.518 1.482	1 2 3 4 5
130	\begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 5 & 4 \\ 5 & 5 & 6 & 6 & 6 & 6 & 6 \end{pmatrix}	230·000 160·303 141·641 134·818 132·052	86·792 60·492 53·450 50·875 49·831	38.655 26.942 23.805 22.658 22.194	12.010 8.371 7.396 7.040 6.896	2.701 1.883 1.663 1.583 1.551	1 2 3 4 5

Day Court	Years	ONE P	OUND	ONE POUND	PER ANNUM	Years
Per Cent.	rears	Amount	Present Value	Amount	Present Value	10010
140	\begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5	2·40000 5·76000 13·82400 33·17760 79·62624	•41667 •17361 •07234 •03014 •01256	1 00000 3 40000 9 16000 22 98400 56 16160	·41667 ·59028 ·66262 ·69276 ·70532	1 2 3 4 5
150	$ \begin{cases} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{cases} $	2·50000 6·25000 15·62500 39·06250 97·65625	•4000 •16000 •06400 •02560 •01024	1.00000 3.50000 9.75000 25.37500 64.43750	•40000 •56000 •62400 •64960 65984	1 2 3 4 5
160	\begin{cases} 1 & 2 & \\ 3 & 4 & \\ 5 & \end{cases}	2.60000 6.76000 17.57600 45.69760 118.81376	•38462 •14793 •05690 •02188 •00842	1.00000 3.60000 10.36000 27.93600 73.63360	·38462 ·53254 ·58944 ·61132 ·61974	1 2 3 4 5
170	\begin{cases} 1 & 2 & \\ 3 & 4 & \\ 5 & \end{cases}	2·70000 7·29000 19·68300 53·14410 143·48907	·37037 ·13717 ·05081 ·01882 ·00697	1.00000 3.70000 10.99000 30.67300 83.81710	·37°37 ·5°754 ·55835 ·57717 ·58414	1 2 3 4 5
180	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	2·80000 7·84000 21·95200 61·46560 172·10368	*35714 *12755 *04555 *01627 *00581	1.00000 3.80000 11.64000 33.59200 95.05760	·35714 ·48469 ·53025 ·54652 ·55233	3 4 5
190	\begin{cases} \begin{cases} \ \ \ 2 \ \ 3 \ \ 4 \ 5 \end{cases} \end{cases}	2·90000 8·41000 24·38900 70·72810 205·11149	*34483 *11891 *04100 *01414 *00488	1.00000 3.90000 12.31000 36.69900 107.42710	·34483 ·46373 ·50474 ·51887 ·52375	1 2 3 4 5
200	$\begin{bmatrix} 1\\2\\3\\4\\5 \end{bmatrix}$	3.00000 9.00000 27.00000 81.00000 243.00000	*03704 *01235	1.00000 4.00000 13.00000 40.00000 121.00000	*33333 *44444 *48148 *49383 *49794	1 2 3 4 5
225	\begin{cases} \begin{cases} \ 1 \ 2 \ 3 \ 4 \ 5 \end{cases}	3·25000 10·56250 34·32813 111·56641 562·59083	•09467 •02913 •00896	1.00000 4.25000 14.81250 49.14063 160.70703	·30769 40237 ·43150 ·44046 ·44322	1 2 3 4 5
250	\begin{cases} \begin{cases} 1 & 2 & \\ 3 & 4 & \\ 5 & \end{cases} \]	3·50000 12·25000 42·87500 150·06250 525·21875	•08163 •02332 •00666	1.00000 4.50000 16.75000 59.62500 209.68750	·28571 ·36735 ·39067 ·39733 ·39924	1 2 3 4 5
300	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	4.00000 16.00000 64.00000 256.00000 1024.00000	• • • • • • • • • • • • • • • • • • •	1.00000 5.00000 21.00000 85.00000 341.00000	·25000 ·31250 ·32813 ·33203 ·33301	1 2 3 4 5

For explanation see pp. (25-28).

Per Cent.	Years	PAYM	ENT TO D	ISCHARGE NTEREST		£100	Years
		Annual	Half-Yearly	Quarterly	Monthly	Weekly	
140	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	240·000 169·412 150·917 144·351 141·781	88.889 62.745 55.895 53.463 52.511	39·344 27·772 24·740 23·664 23·243	12·183 8·600 7·661 7·327 7·197	2·737 1·932 1·721 1·646 1·617	1 2 3 4 5
150	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	250·000 178·571 160·256 153·941 151·552	90·909 64·935 58·275 55·979 55·110	40.000 28.571 25.641 24.631 24.248	12·346 8·818 7·914 7·602 7·484	2·770 1·979 1·776 1·706 1·679	1 2 3 4 5
160	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	260·000 187·778 169·653 163·580 161·358	92·857 67·063 60·590 58·421 57·628	40.625 29.340 26.508 25.559 25.212	12·500 9·028 8·156 7·864 7·758	2·802 2·023 1·828 1·763 1·739	1 2 3 4 5
170	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	270·000 197·027 179·099 173·260 171·193	94.737 69.132 62.842 60.793 60.068	41·221 30·080 27·343 26·452 26·136	12.646 9.228 8.389 8.115 8.018	2·832 2·066 1·878 1·817 1·795	1 2 3 4 5
180	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	280·000 206·316 188·591 182·977 181·052	96·552 71·143 65·031 63·095 62·432	41.791 30.793 28.148 27.310 27.023	12·785 9·421 8·611 8·355 8·267	2·860 2·107 1·926 1·869	1 2 3 4 5
190	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	290·000 215·641 198·123 192·725 190·931	98·305 73·099 67·161 65·330 64·722	42·336 31·480 28·923 28·135 27·873	12·918 9·605 8·825 8·585 8·505	2·887 2·147 1·972 1·919 1·901	1 2 3 4 5
200	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	300.000 225.000 207.692 202.500 200.826	100.000 75.000 69.231 67.500 66.942	42.857 32.143 29.670 28.929 28.689	13.043 9.783 9.030 8.804 8.732	2·913 2·184 2·016 1·966 1·950	1 2 3 4 5
225	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	325.000 248.529 231.751 227.035 225.622	104·000 79·529 74·160 72·651 72·199	44.068 33.699 31.424 30.784 30.593	13·333 10·196 9·508 9·314 9·256	2·971 2·272 2·119 2·076 2·063	1 2 3 4 5
250	$\begin{cases} \mathbf{I} \\ 2 \\ 3 \\ 4 \\ 5 \end{cases}$	350·000 272·222 255·970 251·677 250·477	107.692 83.761 78.760 77.439 77.070	45·161 35·125 33·028 32·474 32·320	13·592 10·572 9·941 9·774 9·727	3.024 2.352 2.211 2.174 2.164	1 2 3 4 5
300	$\begin{cases} 1\\2\\3\\4\\5 \end{cases}$	400.000 320.000 304.762 301.176 300.293	114·286 91·429 87·075 86·050 85·798	47.059 37.647 35.854 35.433 35.329	14.035 11.228 10.693 10.568	3·113 2·490 2·372 2·344 2·337	1 2 3 4 5

Rate per	SIMPLE	INTEREST ON £	100 FOR	Rate per			
Cent.	1 Day	1 Week	1 Month	Cent.			
ı	•002740	*019231	•083333	I			
2	•005479	•038462	•166667	2			
3	.008219	.057692	•250000	3			
4	•010959	•076923	•333333	4			
5	•013699	•096154	•416667	5			
10	.027397	•192308	·833333	10			
15	·041096	•288462	1.250000	15			
20	.054795	.384615	1.666667	20			
25	•068493	•480769	2.083333	25			
30	.082192	•576923	2.500000	30			
35	·09 5 890	673077	2.916667	35			
40	•109589	•769231	3.333333	40			
45	•123288	·865385	3.750000	45			
50	•136986	.961538	4.166667	50			
55	•150685	1.057692	4.583333	55			
60	•164384	1.153846	5.000000	60			
65	•178082	1.250000	5.416667	65			
70	•191781	1.346154	5.833333	70			
75	•205479	1.442308	6.250000	75			
80	•219178	1.538462	6.666667	80			
85	•232877	1.634615	7.083333	85			
90	•246575	1.730769	7.500000	90			
95	•260274	1.826923	7.916667	95			
100	•273973	1.923077	8.333333	100			
110	•301370	2.115385	9.166667	110			
120	.328767	2.307692	10.000000	120			
130	•356164	2.500000	10.833333	130			
140	•383562	2.692308	11.666667	140			
150	•410959	2.884615	12.500000	150			
160	•438356	3.076923	13.333333	160			
170	•465753	3.269231	14.166667	170			
180	493151	3.461538	15.000000	180			
190	•520548	3.653846	15.833333	190 200			
200	·547945	3.846154	10.000007	250			
210	•575342	4.038462	17.500000	210			
220	•602740	4.230769	18.333333	220			
230	•630137	4.423077	19.166667	230			
240 250	·657534 ·684932	4·615385 4·807692	20.000000	240			
				260			
260	•712329	5.000000	21.666667				
270	·739726	5.192308	22.500000	270 280			
280	·767123	5.384615	23·333333 24·166667	250			
290	·794521 ·821918	5·576923 5·769231	25.000000	300			
300	021910	5 /09231	23 000000	300			

For explanation see pp. (28, 29).

SIMPLE INTEREST TABLES

DAYS FROM DATE TO DATE

5 PER CENT. INTEREST TABLES

INTEREST ACCOUNT AND DISCOUNT

DECIMALS OF £1

SIMPLE INTEREST TABLES

38. 47.			DA.	YS F	ROM	DAT	E T	O DA	TE			Month
Month	1	2	3	4	5	6	7	8	9	10		Mond
Jan.		2	3	4	5	6	7	8	9	10		Jan.
Feb.	32	33	34	35	5 36	37	38	39	40	41		Feb
Mar.	60	61	62	63	64	65	66	67	68	69		Mar
Apl.	91	92	93	94	95	96	97	98	. 99	ICO		Apl.
May	121	122	123	124	125	126	127	128	129	130		May
June	152	153	154	155	156	157	158	159	160	161		June
July	182	183	184	185	186	187	188	189	190	191		July
Aug.	213	214	215	216	217	218	219	220	221	222		Aug
Sept.	244	245	246	247	248	249	250	251	252	253	•••	Sept
Oct.	274	275	276	277	278	279	280	281	282	283		Oct.
Nov.	305	306	307	308	309	310	311.	312	313	314		Nov.
Dec.	335	336	337	338	339	340	341	342	343	344	•••	Dec.
	11	12	13	14	15	16	17	18	19	20		
Jan.	11	12	13	14	15	16	17	18	19	20		Jan.
Feb.	42	43	44	45	46	47	48	49	50	51		Feb.
Mar.	70	71	72	73	74	75	76	77	78	79	• • •	Mar
Apl.	101	102	103	104	105	106	107	108	109	110	• • •	Apl.
May	131	132.	133	134	135	136	137	138	139	140		May
June	162	163	164	165	166	167	168	169	170	171	•••	June
July	192	193	194	195	196	197	198	199	200	201		July
Aug.	223	224	225	226	227	228	229	230	231	232		Aug
Sept.	254	255	256	257	258	259	260	261	262	263	•••	Sept
Oct.	284	285	286	287	288	289	290	291	292	293		Oct.
Nov.	315	316	317	318	319	320	321	322	323	324		Nov.
Dec.	345	346	347	348	349	350	351	352	353	354	•••	Dec.
	21	22	23	24	25	26	27	28	29	30	31	
Jan. Feb.	21	22	23	24	25	26	27	28	29	30	31	Jan.
	52	53	54	55	56	57	58	59				Feb. Mar
Mar.	80	81	82	83	84	85	86	87	88	89	90	wai
Apl.	111	112	113	114	115	116	117	118	119	120		Apl.
May	141	142	143	144	145	146	147	148	149	150	151	May
June	172	173	174	175	176	177	178	179	180	181		June
July	202	203	204	205	206	207	208	209	210	2 Ï I	212	July
Aug.	233	234	235	236	237	238	239	240	241	242	243	Aug
Sept.	264	265	266	267	268	269	2.70	271	272	273	•••	Sept
Oct.	294	295	296	297	298	299	300	301	302	303	304	Oct.
Nov.	325	326	327	328	329	330	331	332	333	334		Nov Dec
Dec.	355	356	357	358	359	360	361	362	363	364	365	Dec

For explanation see p. (29). (218)

DAYS FROM DATE TO DATE

Month			D.	AYS	FROI	M DA	ATE	то і	DATE			
Month	1	2	3	4	5	6	7	8	9	10		Monti
Jan. Feb. Mar.	366 397 425	398	368 399 427	400	401	402	403	404	405	406	5	Jan. Feb. Mar
Apl. May June	456 486 517	487	458 488 519	489	460 490 521		492	493	494	465		Apl. May June
July Aug. Sept.	547 578 609		549 580 611	550 581 612	551 582 613	552 583 614		585	586	587		July Aug. Sept.
Oct. Nov. Dec.	639 670 700		641 672 702	642 673 703	643 674 704	644 675 705	645 676 706	646 677 707	678		•••	Oct. Nov. Dec.
	11	12	13	14	15	16	17	18	19	20	-	
Jan. Feb. Mar.	376 407 435	377 408 436	378 409 437	379 410 438	380 411 439	381 412 440	382 413 441	383 414 442	415	385 416 444	•••	Jan. Feb. Mar.
Apl. May June	466 496 527	467 497 528	468 498 529	469 499 530	470 500 531	471 501 532	472 502 533	473 503 534	474 504 535	475 505 536	***	Apl. May June
July Aug. Sept.	557 588 619	558 589 620	559 590 621	560 591 622	561 592 623	562 593 624	563 594 625	564 595 626	565 596 627	566 597 628	***	July Aug. Sept.
Oct. Nov. Dec.	649 680 710	650 681 711	651 682 712	652 683 713	653 684 714	654 685 715	655 686 716	656 687 717	657 688 718	658 689 719	•••	Oct. Nov. Dec.
	21	22	23	24	25	26	27	28	29	30	31	
Jan. Feb. Mar.	386 417 445	387 418 446	388 419 447	389 420 448	390 421 449	391 422 450	392 423 451	393 424 452	394 453	395 454	396 455	Jan. Feb. Mar.
Apl. May June	476 506 537	477 507 538	478 508 539	479 509 5 40	480 510 541	481 511 542	482 512 543	483 513 544	484 514 545	485 515 546	516	Apl. May June
July Aug. Sept.	567 598 629	568 599 630	569 600 631	- 1		572 603 634	573 604 635	574 605 636	575 606 637	576 607 638	577 608	July Aug. Sept.
Oct. Nov. Dec.	659 690 720		661 692 722	693	694	664 695 725	665 696 726	666 697 727	667 698 728	668 699 729	669 730	Oct. Nov. Dec.

1, 74, 147, 220, 293 Days

			- 1		- 1	
Capita1	1 74 147 220 293	2 75 148 221 294	3 76 149 222 295	77 150 223 296	5 78 151 224 297	Capital
£ 100 200 300 400 500	£ .0137 .0274 .0411 .0548 .0685	£ .0274 .0548 .0822 .1096 .1370	£ .0411 .0822 .1233 .1644 .2055	£ .0548 .1096 .1644 .2192 .2740	£ .0685 ·1370 ·2055 ·2740 ·3425	£ 100 200 300 400 500
600	•0822	·1644	•2466	·3288	·4110	600
700	•0959	·1918	•2877	·3836	·4795	700
800	•1096	·2192	•3288	·4384	·5479	800
900	•1233	·2466	•3699	·4932	·6164	900
1000	•1370	·2740	•4110	·5479	·6849	1000
1100	·1507	·3014	*4521	·6027	*7534	1100
1200	·1644	·3288	*4932	·6575	•8219	1200
1300	·1781	·3562	*5342	·7123	•8904	1300
1400	·1918	·3836	*5753	·7671	9589	1400
1500	·2055	·4110	*6164	·8219	1•0274	1500
1600	•2192	·4384	•6575	•8767	1.0959	1600
1700	•2329	·4658	•6986	•9315	1.1644	1700
1800	•2466	·4932	7397	•9863	1.2329	1800
1900	•2603	·5205	•7808	1•0411	1.3014	1900
2000	•2740	·5479	•8219	1•0959	1.3699	2000
2100	•2877	•5753	·8630	1·1507	1·4384	2100
2200	•3014	•6027	·9041	1·2055	1·5068	2200
2300	•3151	•6301	·9452	1·2603	1·5753	2300
2400	•3288	•6575	·9863	1·3151	1·6438	2400
2500	•3425	•6849	I·0274	1 3699	1·7123	2500
2600	·3562	•7123	1·0685	1·4247	1·7808	2600
2700	·3699	•7397	1·1096	1·4795	1·8493	2700
2800	·3836	•7671	1·1507	1·5342	1·9178	2800
2900	·3973	•7945	1·1918	1·5890	1·9863	2900
3000	·4110	•8219	1·2329	1·6438	2·0548	3000
3100	•4247	•8493	1·2740	1.6986	2·1233	3100
3200	•4384	•8767	1·3151	1.7534	2·1918	3200
3300	•4521	•9041	1·3562	1.8082	2·2603	3300
3400	•4658	•9315	1·3973	1.8630	2·3288	3400
3500	•4795	•9589	1·4384	1.9178	2·3973	3500
3600	*4932	•9863	1.4795	1.9726	2·4658	3600
3700	*5068	••0137	1.5205	2.0274	2·5342	3700
3800	*5205	••0411	1.5616	2.0822	2·6027	3800
3900	*5342	••0685	1.6027	2.1370	2·6712	3900
4000	*5479	••0959	1.6438	2.1918	2·7397	4000
4100	·5616	1·1233	1.6849	2·2466	2·8082	4100
4200	·5753	1·1507	1.7260	2·3014	2·8767	4200
4300	·5890	1·1781	1.7671	2·3562	2·9452	4300
4400	·6027	1·2055	1.8082	2·4110	3·0137	4400
4500	·6164	1·2329	1.8493	2 4658	3·0822	4500
4600	·6301	1·2603	1.8904	2·5205	3·1507	4600
4700	·6438	1·2877	1.9315	2·5753	3·2192	4700
4800	·6575	1·3151	1.9726	2·6301	3·2877	4800
4900	·6712	1·3425	2.0137	2·6849	3·3562	4900
5000	·6849	1·3699	2.0548	2·7397	3·4247	5000

Add or capital for 74-78 days. Add or capital for 147-151 days.

For explanation see pp. (29-31).

5, 78, 151, 224, 297 Days

	1	1	1			
Capital	1 74 147 220 293	75 148 221 294	76 149 222 295	77 150 223 296	5 78 151 224 297	Capital
£ 5100 5200 5300 5400 5500	£ .6986 .7123 .7260 .7397 .7534	£ 1·3973 1·4247 1·4521 1·4795 1·5068	£ 2.0959 2.1370 2.1781 2.2192 2.2603	£ 2.7945 2.8493 2.9041 2.9589 3.0137	£ 3.4932 3.5616 3.6301 3.6986 3.7671	£ 5100 5200 5300 5400 5500
5600	•7671	1·5342	2·3014	3.0685	3.8356	5600
5700	•7808	1·5616	2·3425	3.1233	3.9041	5700
5800	•7945	1·5890	2·3836	3.1781	3.9726	5800
5900	•8082	1·6164	2·4247	3.2329	4.0411	5900
6000	8219	1·6438	2·4658	3.2877	4.1096	6000
6100	•8356	1.6712	2·5068	3·3425	4·1781	6100
6200	•8493	1.6986	2·5479	3·3973	4·2466	6200
6300	•8630	1.7260	2·5890	3·4521	4·3151	6300
6400	•8767	1.7534	2·6301	3·5068	4·3836	6400
6500	•8904	1.7808	2·6712	3·5616	4·4521	6500
6600	·9041	1.8082	2.7123	3.6164	4.5205	6600
6700	·9178	1.8356	2.7534	3.6712	4.5890	6700
6800	·9315	1.8630	2.7945	3.7260	4.6575	6800
6900	·9452	1.8904	2.8356	3.7808	4.7260	6900
7000	·9589	1.9178	2.8767	3.8356	4.7945	7000
7100	•9726	1.9452	2·9178	3.8904	4.8630	7100
7200	•9863	1.9726	2·9589	3.9452	4.9315	7200
7300	1•0000	2.0000	3·0000	4.0000	5.0000	7300
7400	1•0137	2.0274	3·0411	4.0548	5.0685	7400
7500	1•0274	2.0548	3·0822	4.1096	5.1370	7500
7600	1.0411	2.0822	3·1233	4·1644	5·2055	7600
7700	1.0548	2.1096	3·1644	4·2192	5·2740	7700
7800	1.0685	2.1370	3·2055	4·2740	5·3425	7800
7900	1.0822	2.1644	3·2466	4·3288	5·4110	7900
8000	1.0959	2.1918	3·2877	4·3836	5·4795	8000
8100	1·1096	2·2192	3·3288	4·43 ⁸ 4	5.5479	8100
8200	1·1233	2·2466	3·3699	4·493 ²	5.6164	8200
8300	1·1370	2·2740	3·4110	4·5479	5.6849	8300
8400	1·1507	2·3014	3·4521	4·6027	5.7534	8400
8500	1·1644	2·3288	3·4932	4·6575	5.8219	8500
8600	1·1781	2·3562	3·5342	4.7123	5·8904	8600
8700	1·1918	2·3836	3·5753	4.7671	5·9589	8700
8800	2·2055	2·4110	3·6164	4.8219	6·0274	8800
8900	1·2192	2·4384	3·6575	4.8767	6·0959	8900
9000	1·2329	2·4658	3·6986	4.9315	6·1644	9000
9100	1·2466	2·4932	3.7397	4.9863	6·2329	9100
9200	1·2603	2·5205	3.7808	5.0411	6·3014	9200
9300	1·2740	2·5479	3.8219	5.0959	6·3699	9300
9400	1·2877	2·5753	3.8630	5.1507	6·4384	9400
9500	1·3014	2·6027	3.9041	5.2055	6·5068	9500
9600	1·3151	2.6301	3·9452	5·2603	6.5753	9600
9700	1·3288	2.6575	3·9863	5·3151	6.6438	9700
9800	1·3425	2.6849	4·0274	5·3699	6.7123	9800
9900	1·3562	2.7123	4·0685	5·4247	6.7808	9900
10,000	1·3699	2.7397	4·1096	5·4795	6.8493	10,000

Add ·03 capital for 220-224 days. Add ·04 capital for 293-297 days.

6, 79, 152, 225, 298 Days

Capital	6 79 152 225 298	7 80 153 226 299	8 81 154 227 300	9 82 155 228 301	10 83 156 229 302	Capital
£ 100 200 300 400 500	£ .0822 .1644 .2466 .3288 .4110	£ .0959 .1918 .2877 .3836 .4795	£ .1096 .2192 .3288 .4384 .5479	£ .1233 .2466 .3699 .4932 .6164	£ .1370 .2740 .4110 .5479 .6849	£ 100 200 300 400 500
600	*4932	•5753	·6575	.7397	·8219	600
700	*5753	•6712	·7671	.8630	·9589	700
800	*6575	•7671	·8767	.9863	I·0959	800
900	*7397	•8630	·9863	1.1096	I·2329	900
1000	*8219	•9589	I·0959	1.2329	I·3699	1000
1100	*9041	1.0548	1·2055	1·3562	1.5068	1100
1200	*9863	1.1507	1·3151	1·4795	1.6438	1200
1300	1*0685	1.2466	1·4247	r·6027	1.7808	1300
1400	1*1507	1.3425	1·5342	1·7260	1.9178	1400
1500	1*2329	1.4384	1·6438	1·8493	2.0548	1500
1600	1·3151	1.5342	1.7534	1.9726	2·1918	1600
1700	1·3973	1.6301	1.8630	2.0959	2·3288	1700
1800	1·4795	1.7260	1.9726	2.2192	2·4658	1800
1900	1·5616	1.8219	2.0822	2.3425	2·6027	1900
2000	1·6438	1.9178	2.1918	2.4658	2·7397	2000
2100	1·7260	2·0137	2·3014	2·5890	2·8767	2100
2200	1·8082	2·1096	2·4110	2·7123	3·0137	2200
2300	1·8904	2·2055	2·5205	2·8356	3·1507	2300
2400	1·9726	2·3014	2·6301	2·9589	3·2877	2400
2500	2·0548	2·3973	2·7397	3·0822	3·4247	2500
2600	2·1370	2·4932	2·8493	3·2055	3.5616	2600
2700	2·2192	2·5890	2·9589	3·3288	3.6986	2700
2800	2·3014	2·6849	3·0685	3·4521	3.8356	2800
2900	2·3836	2·7808	3·1781	3·5753	3.9726	2900
3000	2·4658	2·8767	3·2877	3·6986	4.1096	3000
3100	2·5479	2·9726	3·3973	3.8219	4.2466	3100
3200	2·6301	3·0685	3·5068	3.9452	4.3836	3200
3300	2·7123	3·1644	3·6164	4.0685	4.5205	3300
3400	2·7945	3·2603	3·7260	4.1918	4.6575	3400
3500	2·8767	3·3562	3·8356	4.3151	4.7945	3500
3600	2·9589	3·4521	3.9452	4.4384	4.9315	3600
3700	3·0411	3·5479	4.0548	4.5616	5.0685	3700
3800	3·1233	3·6438	4.1644	4.6849	5.2055	3800
3900	3·2055	3·7397	4.2740	4.8082	5.3425	3900
4000	3·2877	3·8356	4.3836	4.9315	5.4795	4000
4100	3·3699	3·9315	4·4932	5.0548	5.6164	4100
4200	3·4521	4·0274	4·6027	5.1781	5.7534	4200
4300	3·5342	4·1233	4·7123	5.3014	5.8904	4300
4400	3·6164	4·2192	4 8219	5.4247	6.0274	4400
4500	3·6986	4·3151	4·9315	5.5479	6.1644	4500
4600	3.7808	4·4110	5.0411	5.6712	6·3014	4600
4700	3.8630	4·5068	5.1507	5.7945	6·4384	4700
4800	3.9452	4·6027	5.2603	5.9178	6·5753	4800
4900	4.0274	4·6986	5.3699	6.0411	6·7123	4900
5000	4.1096	4·7945	5.4795	6.1644	6·8493	5000

Add or capital for 79-83 days. Add o2 capital for 152-156 days. For explanation see pp. (29-31).

10, 83, 156, 229, 302 Days

Capital	6 79 152 225 298	7 80 153 226 299	8 81 154 227 300	9 82 155 228 301	10 83 156 229 302	Capital
£ 5100 5200 5300 5400 5500	£ 4.1918 4.2740 4.3562 4.4384 4.5205	£ 4.8904 4.9863 5.0822 5.1781 5.2740	£ 5.5890 5.6986 5.8082 5.9178 6.0274	£ 6·2877 6·4110 6·5342 6·6575 6·7808	£ 6.9863 7.1233 7.2603 7.3973 7.5342	£ 5100 5200 5300 5400 5500
5600	4·6027	5·3699	6·1370	6·9041	7.6712	5600
5700	4·6849	5·4658	6·2466	7·0274	7.8082	5700
5800	4·7671	5·5616	6·3562	7·1507	7.9452	5800
5900	4·8493	5·6575	6·4658	7·2740	8.0822	5900
6000	4·9315	5·7534	6·5753	7·3973	8.2192	6000
6100	5.0137	5·8493	6.6849	7·5205	8·3562	6100
6200	5.0959	5·9452	6.7945	7·6438	8·4932	6200
6300	5.1781	6·0411	6.9041	7·7671	8·6301	6300
6400	5.2603	6·1370	7.0137	7·8904	8·7671	6400
6500	5.3425	6·2329	7.1233	8·0137	8·9041	6500
6600	5.4247	6·3288	7·2329	8·1370	9.0411	6600
6700	5.5068	6·4247	7·3425	8·2603	9.1781	6700
6800	5.5890	6·5205	7·4521	8·3836	9.3151	6800
6900	5.6712	6·6164	7·5616	8·5068	9.4521	6900
7000	5.7534	6·7123	7·6712	8·6301	9.5890	7000
7100	5.8356	6.8082	7.7808	8.7534	9.7260	7100
7200	5.9178	6.9041	7.8904	8.8767	9.8630	7200
7300	6.0000	7.0000	8.0000	9.0000	10.0000	7300
7400	6.0822	7.0959	8.1096	9.1233	10.1370	7400
7500	6.1644	7.1918	8.2192	9.2466	10.2740	7500
7600	6·2466	7·2877	8·3288	9·3699	10.4110	7600
7700	6·3288	7·3836	8·4384	9·4932	10.5479	7700
7800	6·4110	7·4795	8·5479	9·6164	10.6849	7800
7900	6·4932	7·5753	8·6575	9·7397	10.8219	7900
8000	6·5753	7·6712	8·7671	9·8630	10.9589	8000
8100 8200 8300 8400 8500	6.6575 6.7397 6.8219 6.9041 6.9863	7·7671 7·8630 7·9589 8·0548 8·1507	8·8767 8·9863 9·0959 9·2055 9·3151	9.9863 10.1096 10.2329 10.3562 10.4795	11.0959 11.2329 11.3699 11.5068	8100 8200 8300 8400 8500
8600 8700 8800 8900 9000	7.0685 7.1507 7.2329 7.3151 7.3973	8·2466 8·3425 8·4384 8·5342 8·6301	9.4247 9.5342 9.6438 9.7534 9.8630	10·6027 10·7260 10·8493 10·9726 11·0959	11.6438 11.7808 11.9178 12.0548 12.1918 12.3288	8600 8700 8800 8900 9000
9100	7·4795	8·7260	9·9726	11·2192	12·4658	9100
9200	7·5616	8·8219	10 0822	11·3425	12·6027	9200
9300	7·6438	8·9178	10·1918	11·4658	12·7397	9300
9400	7·7260	9·0137	10·3014	11·5890	12·8767	9400
9500	7·8082	9·1096	10·4110	11·7123	13·0137	9500
9600	7·8904	9·2055	10·5205	11.8356	13·1507	9600
9700	7·9726	9·3014	10·6301	11.9589	13·2877	9700
9800	8·0548	9·3973	10·7397	12.0822	13·4247	9800
9900	8·1370	9·4932	10·8493	12.2055	13·5616	9900
0,000	8·2192	9·5890	10·9589	12.3288	13·6986	10,000

Add ·03 capital for 225-229 days. Add ·04 capital for 298-302 days.

11, 84, 157, 230, 303 Days

Capital	11 84 157 230 303	12 85 158 231 304	13 86 159 232 305	14 87 160 233 306	15 88 161 234 307	Capital
£ 100 200 300 400 500	£ .1507 .3014 .4521 .6027 .7534	£ .1644 .3288 .4932 .6575 .8219	£ •1781 •3562 •5342 •7123 •8904	£ .1918 .3836 .5753 .7671 .9589	£ ·2055 ·4110 ·6164 ·8219 1·0274	£ 100 200 300 400 500
600	·9041	·9863	1.0685	1·1507	1·2329	600
700	1·0548	1·1507	1.2466	1·3425	1·4384	700
800	1·2055	1·3151	1.4247	1·5342	1·6438	800
900	1·3562	1·4795	1.6027	1·7260	1·8493	900
1000	1·5068	1·6438	1.7808	1·9178	2·0548	1000
1100	1.6575	1.8082	1.9589	2·1096	2 2603	1100
1200	1.8082	1.9726	2.1370	2·3014	2·4658	1200
1300	1.9589	2.1370	2.3151	2·4932	2·6712	1300
1400	2.1096	2.3014	2.4932	2·6849	2·8767	1400
1500	2.2603	2.4658	2.6712	2·8767	3·0822	1500
1600	2·4110	2.6301	2·8493	3.0685	3·2877	1600
1700	2·5616	2.7945	3·0274	3.2603	3·4932	1700
1800	2·7123	2.9589	3·2055	3.4521	3·6986	1800
1900	2·8630	3.1233	3·3836	3.6438	3·9041	1900
2000	3·0137	3.2877	3·5616	3.8356	4·1096	2000
2100	3·1644	3·4521	3.7397	4.0274	4·3151	2100
2200	3·3151	3·6164	3.9178	4.2192	4·5205	2200
2300	3·4658	3·7808	4.0959	4.4110	4·7260	2300
2400	3·6164	3·9452	4.2740	4.6027	4·9315	2400
2500	3·7671	4·1096	4.4521	4.7945	5•1370	2500
2600	3.9178	4·2740	4.6301	4.9863	5·3425	2600
2700	4.0685	4·4384	4.8082	5.1781	5·5479	2700
2800	4.2192	4·6027	4.9863	5.3699	5·7534	2800
2900	4.3699	4·7671	5.1644	5.5616	5·9589	2900
3000	4.5205	4·9315	5.3425	5.7534	6·1644	3000
3100	4.6712	5.0959	5·5205	5.9452	6·3699	3100
3200	4.8219	5.2603	5·6986	6.1370	6·5753	3200
3300	4.9726	5.4247	5·8767	6.3288	6·7808	3300
3400	5.1233	5.5890	6·0548	6.5205	6·9863	3400
3500	5.2740	5.7534	6·2329	6.7123	7·1918	3500
3600	5·4247	5.9178	6·4110	6.9041	7·3973	3600
3700	5·5753	6.0822	6·5890	7.0959	7·6027	3700
3800	5·7260	6.2466	6·7671	7.2877	7·8082	3800
3900	5·8767	6.4110	6·9452	7.4795	8 0137	3900
4000	6·0274	6.5753	7·1233	7.6712	8·2192	4000
4100	6·1781	6·7397	7·3014	7·8630	8·4247	4100
4200	6·3288	6·9041	7·4795	8·0548	8·6301	4200
4300	6·4795	7·0685	7·6575	8·2466	8·8356	4300
4400	6·6301	7·2329	7·8356	8·4384	9·0411	4400
4500	6·7808	7·3973	8·0137	8·6301	9·2466	4500
4600	6·9315	7·5616	8·1918	8·8219	9.4521	4600
4700	7·0822	7·7260	8·3699	9·0137	9.6575	4700
4800	7·2329	7·8904	8·5479	9·2055	9.8630	4800
4900	7·3836	8·0548	8·7260	9·3973	10.0685	4900
5000	7·5342	8·2192	8·9041	9·5890	10.2740	5000

Add on capital for 84-88 days. Add on capital for 157-161 days.

For explanation see pp. (29-31).

15, 88, 161, 234, 307 Days

Capital	11 84 157 230 303	12 85 158 231 304	13 86 159 232 305	14 87 160 233 306	15 88 161 234 307	Capital
£ 5100 5200 5300 5400 5500	£ 7.6849 7.8356 7.9863 8.1370 8.2877	£ 8.3836 8.5479 8.7123 8.8767 9.0411	£ 9.0822 9.2603 9.4384 9.6164 9.7945	£ 9.7808 9.9726 10.1644 10.3562 10.5479	£ 10.4795 10.6849 10.8904 11.0959 11.3014	5100 5200 5300 5400 5500
5600	8·4384	9·2055	9·9726	10·7397	11.5068	5600
5700	8·5890	9·3699	10·1507	10·9315	11.7123	5700
5800	8·7397	9·5342	10·3288	11 1233	11.9178	5800
5900	8·8904	9·6986	10·5068	11·3151	12.1233	5900
6000	9·0411	9·8630	10·6849	11·5068	12.3288	6000
6100	9·1918	10·0274	10.8630	11.6986	12·5342	6100
6200	9·3425	10·1918	11.0411	11.8904	12·7397	6200
6300	9·4932	10·3562	11.2192	12.0822	12·9452	6300
6400	9·6438	10·5205	11.3973	12.2740	13·1507	6400
6500	9·7945	10·6849	11.5753	12.4658	13·3562	6500
6600	9.9452	10·8493	11.7534	12.6575	13·5616	6600
6700	10.0959	11·0137	11.9315	12.8493	13·7671	6700
6800	10.2466	11·1781	12.1096	13.0411	13·9726	6800
6900	10.3973	11·3425	12.2877	13.2329	14·1781	6900
7000	10.5479	11·5068	12.4658	13.4247	14·3836	7000
7100	10.6986	11.6712	12.6438	13.6164	14.5890	7100
7200	10.8493	11.8356	12.8219	13.8082	14.7945	7200
7300	11.0000	12.0000	13.0000	14.0000	15.0000	7300
7400	11.1507	12.1644	13.1781	14.1918	15.2055	7400
7500	11.3014	12.3288	13.3562	14.3836	15.4110	7500
7600	11.4521	12·4932	13·5342	14.5753	15.6164	7600
7700	11.6027	12·6575	13·7123	14.7671	15.8219	7700
7800	11.7534	12·8219	13·8904	14.9589	16.0274	7800
7900	11.9041	12·9863	14·0685	15.1507	16.2329	7900
8000	12.0548	13·1507	14·2466	15.3425	16.4384	8000
8100	12·2055	13·3151	14·4247	15·5342	16.6438	8100
8200	12·3562	13·4795	14·6027	15·7260	16.8493	8200
8300	12·5068	13·6438	14·7808	15·9178	17.0548	8300
8400	12·6575	13·8082	14·9589	16·1096	17.2603	8400
8500	12·8082	13·9726	15·1370	16·3014	17.4658	8500
8600	12·9589	14·1370	15·3151	16·4932	17.6712	8600
8700	13·1096	14·3014	15·4932	16·6849	17.8767	8700
8800	13 2603	14·4658	15·6712	16·8767	18.0822	8800
8900	13·4110	14·6301	15·8493	17·0685	18.2877	8900
9000	13·5616	14·7945	16·0274	17·2603	18.4932	9000
9100	13.7123	14·9589	16·2055	17.4521	18.6986	9100
9200	13.8630	15·1233	16·3836	17.6438	18.9041	9200
9300	14.0137	15·2877	16·5616	17.8356	19.1096	9300
9400	14.1644	15·4521	16·7397	18.0274	19.3151	9400
9500	14.3151	15·6164	16·9178	18.2192	19.5205	9500
9600 9700 9800 9900 0,000	14·4658 14·6164 14·7671 14·9178 15·0685	15·7808 15·9452 16·1096 16·2740 16·4384	17·0959 17·2740 17·4521 17·6301 17·8082	18·4110 18·6027 18·7945 18·9863 19·1781	19 5203 19 7260 19 9315 20 1370 20 3425 20 5479	9600 9700 9800 9900 10,000

Add ·03 capital for 230-234 days. Add ·04 capital for 303-307 days.

16, 89, 162, 235, 308 Days

Capital	16 89 162 235 308	17 90 163 236 309	18 91 164 237 310	19 92 165 238 311	20 93 166 239 312	Capital
£ 100 200 300 400 500	£ •2192 •4384 •6575 •8767 1•0959	£ •2329 •4658 •6986 •9315 1•1644	£ •2466 •4932 •7397 •9863 1•2329	£ •2603 •5205 •7808 ••0411 ••3014	£ ·2740 ·5479 ·8219 1·0959 1·3699	£ 100 200 300 400 500
600	1·3151	1·3973	1·4795	1.5616	1.6438	600
700	1·5342	1·6301	1·7260	1.8219	1.9178	700
800	1·7534	1·8630	1·9726	2.0822	2.1918	800
900	1·9726	2·0959	2·2192	2.3425	2.4658	900
1000	2·1918	2·3288	2·4658	2.6027	2.7397	1000
1100	2·4110	2·5616	2·7123	2·8630	3.0137	1100
1200	2·6301	2·7945	2·9589	3·1233	3.2877	1200
1300	2·8493	3·0274	3·2055	3·3836	3.5616	1300
1400	3·0685	3·2603	3·4521	3·6438	3.8356	1400
1500	3·2877	3·4932	3·6986	3·9041	4.1096	1500
1600	3·5068	3·7260	3.9452	4·1644	4·3836	1600
1700	3·7260	3·9589	4.1918	4·4247	4·6575	1700
1800	3·9452	4·1918	4.4384	4·6849	4·9315	1800
1900	4·1644	4·4247	4.6849	4·9452	5·2055	1900
2000	4·3836	4·6575	4.9315	5·2055	5·4795	2000
2100	4.6027	4·8904	5·1781	5·4658	5.7534	2100
2200	4.8219	5·1233	5·4247	5·7260	6.0274	2200
2300	5.0411	5·3562	5·6712	5·9863	6.3014	2300
2400	5.2603	5·5890	5·9178	6·2466	6.5753	2400
2500	5.4795	5·8219	6·1644	6·5068	6.8493	2500
2600	5.6986	6.0548	6·4110	6·7671	7·1233	2600
2700	5.9178	6.2877	6·6575	7·0274	7·3973	2700
2800	6.1370	6 5205	6·9041	7·2877	7·6712	2800
2900	6.3562	6.7534	7·1507	7·5479	7·9452	2900
3000	6.5753	6.9863	7·3973	7·8082	8·2192	3000
3100	6·7945	7·2192	7.6438	8·0685	8·4932	3100
3200	7·0137	7·4521	7.8904	8·3288	8·7671	3200
3300	7·2329	7·6849	8.1370	8·5890	9·0411	3300
3400	7·4521	7·9178	8.3836	8·8493	9·3151	3400
3500	7·6712	8·1507	8.6301	9·1096	9·5890	3500
3600	7·8904	8·3836	8·8767	9·3699	9.8630	3600
3700	8·1096	8·6164	9·1233	9·6301	10.1370	3700
3800	8·3288	8·8493	9·3699	9·8904	10.4110	3800
3900	8·5479	9·0822	9·6164	10·1507	10.6849	3900
4000	8·7671	9·3151	9·8630	10·4110°	10.9589	4000
4100	8·9863	9.5479	10·1096	10.6712	11·2329	4100
4200	9·2055	9.7808	10·3562	10.9315	11·5068	4200
4300	9·4247	10.0137	10·6027	11.1918	11·7808	4300
4400	9·6438	10.2466	10·8493	11.4521	12·0548	4400
4500	9·8630	10.4795	11·0959	11.7123	12·3288	4500
4600	10·0822	10·7123	11.3425	11.9726	12.6027	4600
4700	10·3014	10·9452	11.5890	12.2329	12.8767	4700
4800	10·5205	11·1781	11.8356	12.4932	13.1507	4800
4900	10·7397	11·4110	12.0822	12.7534	13.4247	4900
5000	10·9589	11·6438	12.3288	13.0137	13.6986	5000

Add on capital for 89-93 days. Add on capital for 162-166 days. For explanation see pp. (29-31).

20, 93, 166, 239, 312 Days

			·			
Capita	16 89 162 235 308	17 90 163 236 309	18 91 164 237 310	19 92 165 238 311	20 93 166 239 312	Capital
5100 5200 5300 5400 5500	£ 11·1781 11·3973 11·6164 11·8356 12·0548	£ 11.8767 12.1096 12.3425 12.5753 12.8082	£ 12.5753 12.8219 13.0685 13.3151 13.5616	£ 13·2740 13·5342 13·7945 14·0548 14·3151	£ 13.9726 14.2466 14.5205 14.7945 15.0685	£ 5100 5200 5300 5400 5500
5600	12·2740	13.0411	13.8082	14·5753	15·3425	5600
5700	12·4932	13.2740	14.0548	14·8356	15·6164	5700
5800	12·7123	13.5068	14.3014	15·0959	15·8904	5800
5900	12·9315	13.7397	14.5479	15·3562	16·1644	5900
6000	13·1507	13.9726	14.7945	15·6164	16·4384	6000
6100	13·3699	14·2055	15.0411	15.8767	16·7123	6100
6200	13·5890	14·4384	15.2877	16.1370	16·9863	6200
6300	13·8082	14·6712	15.5342	16.3973	17·2603	6300
6400	14·0274	14·9041	15.7808	16.6575	17·5342	6400
6500	14·2466	15·1370	16.0274	16.9178	17·8082	6500
6600	14·4658	15·3699	16·2740	17·1781	18.0822	6600
6700	14·6849	15·6027	16·5205	17·4384	18.3562	6700
6800	14·9041	15·8356	16·7671	17·6986	18.6301	6800
6900	15·1233	16·0685	17·0137	17·9589	18.9041	6900
7000	15·3425	16·3014	17·2603	18·2 1 92	19.1781	7000
7100	15.5616	16·5342	17·5068	18·4795	19.4521	7100
7200	15.7808	16·7671	17·7534	18·7397	19.7260	7200
7300	16.0000	17·0000	18·0000	19·0000	20.0000	7300
7400	16.2192	17·2329	18·2466	19·2603	20.2740	7400
7500	16.4384	17·4658	18·4932	19·5205	20.5479	7500
7600	16.6575	17.6986	18·7397	19.7808	20·8219	7600
7700	16.8767	17.9315	18·9863	20.0411	21·0959	7700
7800	17.0959	18.1644	19·2329	20.3014	21·3699	7800
7900	17.3151	18.3973	19·4795	20.5616	21·6438	7900
8000	17.5342	18.6301	19·7260	20.8219	21·9178	8000
8100	17.7534	18·8630	19·9726	21.0822	22·1918	8100
8200	17.9726	19·0959	20·2192	21.3425	22·4658	8200
8300	18.1918	19·3288	20·4658	21.6027	22·7397	8300
8400	18.4110	19·5616	20·7123	21.8630	23·0137	8400
8500	18.6301	19·7945	20·9589	22.1233	23·2877	8500
8600	18·8493	20·0274	21·2055	22·3836	23·5616	8600
8700	19·0685	20·2603	21·4521	22·6438	23·8356	8700
8800	19·2877	20·4932	21·6986	22·9041	24·1096	8800
8900	19·5068	20·7260	21·9452	23·1644	24·3836	8900
9000	19·7260	20·9589	22·1918	23·4247	24·6575	9000
9100	19·9452	21·1918	22·4384	23.6849	24·9315	9100
9200	20·1644	21·4247	22·6849	23.9452	25·2055	9200
9300	20·3836	21·6575	22·9315	24.2055	25·4795	9300
9400	20·6027	21·8904	23·1781	24.4658	25·7534	9400
9500	20·8219	22·1233	23·4247	24.7260	26·0274	9500
9600	21.0411	22·3562	23.6712	24·9863	26·3014	9600
9700	21.2603	22·5890	23.9178	25·2466	26·5753	9700
9800	21.4795	22·8219	24.1644	25·5068	26·8493	9800
9900	21.6986	23·0548	24.4110	25·7671	27·1233	9900
10,000	21.9178	23·2877	24.6575	26·0274	27·3973	10,000

Add o3 capital for 235-239 days. Add o4 capital for 308-312 days.

21, 94, 167, 240, 313 Days

Capital	21 94 167 240 313	22 95 168 241 314	23 96 169 242 315	24 97 170 243 316	25 98 171 244 317	Capital
£ 100 200 300 400 500	£ .2877 .5753 .8630 .1.1507 .1.4384	£ ·3014 ·6027 ·9041 1·2055 1·5068	£ ·3151 ·6301 ·9452 1·2603 1·5753	£ •3288 •6575 •9863 1•3151 1•6438	£ ·3425 ·6849 I·0274 I·3699 I·7123	£ 100 200 300 400 500
600	1.7260	1.8082	1.8904	1.9726	2.0548	600
700	2.0137	2.1096	2.2055	2.3014	2.3973	700
800	2.3014	2.4110	2.5205	2.6301	2.7397	800
900	2.5890	2.7123	2.8356	2.9589	3.0822	900
1000	2.8767	3.0137	3.1507	3.2877	3.4247	1000
1100	3·1644	3·3151	3·4658	3.6164	3.7671	1100
1200	3·4521	3·6164	3·7808	3.9452	4.1096	1200
1300	3·7397	3·9178	4·0959	4.2740	4.4521	1300
1400	4·0274	4·2192	4·4110	4.6027	4.7945	1400
1500	4·3151	4·5205	4·7260	4.9315	5.1370	1500
1600	4.6027	4.8219	5.0411	5·2603	5.4795	1600
1700	4.8904	5.1233	5.3562	5·5890	5.8219	1700
1800	5.1781	5.4247	5.6712	5·9178	6.1644	1800
1900	5.4658	5.7260	5.9863	6·2466	6.5068	1900
2000	5.7534	6.0274	6.3014	6·5753	6.8493	2000
2100	6.0411	6·3288	6.6164	6·9041	7·1918	2100
2200	6.3288	6·6301	6.9315	7·2329	7·5342	2200
2300	6.6164	6·9315	7.2466	7·5616	7·8767	2300
2400	6.9041	7·2329	7.5616	7·8904	8·2192	2400
2500	7.1918	7·5342	7.8767	8·2192	8·5616	2500
2600	7:4795	7·8356	8·1918	8·5479	8·9041	2600
2700	7:7671	8·1370	8·5068	8·8767	9·2466	2700
2800	8:0548	8·4384	8·8219	9·2055	9·5890	2800
2900	8:3425	8·7397	9·1370	9·5342	9·9315	2900
3000	8:6301	9·0411	9·4521	9·8630	10·2740	3000
3100 3200 3300 3400 3500	8.9178 9.2055 9.4932 9.7808	9·3425 9·6438 9·9452 10·2466 10·5479	9.7671 10.0822 10.3973 10.7123 11.0274	10·1918 10·5205 10·8493 11·1781 11·5068	10.6164 10.9589 11.3014 11.6438	3100 3200 3300 3400 3500
3600	10·3562	10.8493	11·3425	11.8356	12·3288	3600
3700	10·6438	11.1507	11·6575	12.1644	12·6712	3700
3800	10·9315	11.4521	11·9726	12.4932	13·0137	3800
3900	11·2192	11.7534	12·2877	12.8219	13·3562	3900
4000	11·5068	12.0548	12·6027	13.1507	13·6986	4000
4100 4200 4300 4400 4500	11.7945 12.0822 12.3699 12.6575 12.9452	12·3562 12·6575 12·9589 13·2603 13·5616	12·9178 13·2329 13·5479 13·8630 14·1781	13·4795 13·8082 14·1370 14·4658 14·7945	14.0411 14.3836 14.7260 15.0685	4100 4200 4300 4400 4500
4600	13·2329	13.8630	14·4932	15·1233	15.7534	4600
4700	13·5205	14.1644	14·8082	15·4521	16.0959	4700
4800	13·8082	14.4658	15·1233	15·7808	16.4384	4800
4900	14·0959	14.7671	15·4384	16·1096	16.7808	4900
5000	14·3836	15.0685	15·7534	16·4384	17.1233	5000

Add ·01 capital for 94-98 days. Add ·02 capital for 167-171 days. For explanation see pp. (29-31).

25, 98, 171, 244, 317 Days

Capita1	21 94 167 240 313	22 95 168 241 314	23 96 169 242 315	24 97 170 243 316	25 98 171 244 317	Capital
£ 5100 5200 5300 5400 5500	£ 14.6712 14.9589 15.2466 15.5342 15.8219	£ 15·3699 15·6712 15·9726 16·2740 16·5753	£ 16·0685 16·3836 16·6986 17·0137 17·3288	£ 16·7671 17·0959 17·4247 17·7534 18:0822	£ 17.4658 17.8082 18.1507 18.4932 18.8356	£ 5100 5200 5300 5400 5500
5600	16·1096	16.8767	17·6438	18·4110	19·1781	5600
5700	16·3973	17.1781	17·9589	18·7397	19·5205	5700
5800	16·6849	17.4795	18·2740	19·0685	19·8630	5800
5900	16·9726	17.7808	18·5890	19·3973	20·2055	5900
6000	17·2603	18.0822	18·9041	19·7260	20·5479	6000
6100	17·5479	18·3836	19·2192	20·0548	20·8904	6100
6200	17·8356	18·6849	19·5342	20·3836	21·2329	6200
6300	18·1233	18·9863	19·8493	20·7123	21·5753	6300
6400	18·4110	19·2877	20·1644	21·0411	21·9178	6400
6500	18·6986	19·5890	20·4795	21·3699	22·2603	6500
6600	18·9863	19·8904	20·7945	21·6986	22·6027	6600
6700	19·2740	20·1918	21·1096	22·0274	22·9452	6700
6800	19·5616	20·4932	21·4247	22·3562	23·2877	6800
6900	19·8493	20·7945	21·7397	22·6849	23·6301	6900
7000	20·1370	21·0959	22·0548	23·0137	23·9726	7000
7100	20·4247	21·3973	22:3699	23·3425	24·3151	7100
7200	20·7123	21·6986	22.6849	23·6712	24·6575	7200
7300	21·0000	22·0000	23.0000	24·0000	25·0000	7300
7400	21·2877	22·3014	23.3151	24·3288	25·3425	7400
7500	21·5753	22·6027	23.6301	24·6575	25·6849	7500
7600	21.8630	22·904I	23·9452	24·9863	26·0274	7600
7700	22.1507	23·2055	24·2603	25·3151	26·3699	7700
7800	22.4384	23·5068	24·5753	25·6438	26·7123	7800
7900	22.7260	23·8082	24·8904	25·9726	27·0548	7900
8000	23.0137	24·1096	25·2055	26·3014	27·3973	8000
8100	23·3014	24·4110	25·5205	26.6301	27·7397	8100
8200	23·5890	24·7123	25·8356	26.9589	28·0822	8200
8300	23·8767	25·0137	26·1507	27.2877	28·4247	8300
8400	24·1644	25·3151	26·4658	27.6164	28·7671	8400
8500	24·4521	25·6164	26·7808	27.9452	29·1096	8500
8600	24·7397	25·9178	27·0959	28·2740	29·4521	8600
8700	25·0274	26·2192	27·4110	28·6027	29·7945	8700
8800	25·3151	26·5205	27·7260	28·9315	30·1370	8800
8900	25·6027	26·8219	28·0411	29·2603	30·4795	8900
9000	25·8904	27·1233	28·3562	29·5890	30·8219	9000
9100	26·1781	27·4247	28.6712	29·9178	31·1644	9100
9200	26·4658	27·7260	28.9863	30·2466	31·5068	9200
9300	26·7534	28·0274	29.3014	30·5753	31·8493	9300
9400	27·0411	28·3288	29.6164	30·9041	32·1918	9400
9500	27·3288	28·6301	29.9315	31·2329	32·5342	9500
9600	27.6164	28·9315	30·2466	31·5616	32·8767	9600
9700	27.9041	29·2329	30·5616	31·8904	33·2192	9700
9800	28.1918	29·5342	30·8767	32·2192	33·5616	9800
9900	28.4795	29·8356	31·1918	32·5479	33·9041	9900
10,000	28.7671	30·1370	31·5068	32·8767	34·2466	10,000

Add ·03 capital for 240-244 days. Add ·04 capital for 313-317 days.

26, 99, 172, 245, 318 Days

Capital	26 99 172 245 318	27 100 173 246 319	28 101 174 247 320	29 102 175 248 321	30 103 176 249 322	Capital
£ 100 200 300 400 500	£ ·3562 ·7123 1·0685 1·4247 1·7808	£ ·3699 ·7397 1·1096 1·4795 1·8493	£ .3836 .7671 1.1507 1.5342 1.9178	£	£ ·4110 ·8219 1·2329 1·6438 2·0548	£ 100 200 300 400 500
600	2·1370	2·2192	2·3014	2·3836	2·4658	600
700	2·4932	2·5890	2·6849	2·7808	2·8767	700
800	2·8493	2·9589	3·0685	3·1781	3·2877	800
900	3·2055	3·3288	3·4521	3·5753	3·6986	900
1000	3·5616	3·6986	3·8356	3·9726	4·1096	1000
1100	3·9178	4·0685	4·2192	4·3699	4·5205	1100
1200	4·2740	4·4384	4·6027	4·7671	4·9315	1200
1300	4·6301	4·8082	4·9863	5·1644	5·3425	1300
1400	4·9863	5·1781	5·3699	5·5616	5·7534	1400
1500	5·3425	5·5479	5·7534	5·9589	6·1644	1500
1600	5.6986	5.9178	6·1370	6·3562	6·5753	1600
1700	6.0548	6.2877	6·5205	6·7534	6·9863	1700
1800	6.4110	6.6575	6·9041	7·1507	7·3973	1800
1900	6.7671	7.0274	7·2877	7·5479	7·8082	1900
2000	7.1233	7.3973	7·6712	7·9452	8·2192	2000
2100	7·4795	7.7671	8.0548	8·3425	8.6301	2100
2200	7·8356	8.1370	8.4384	8·7397	9.0411	2200
2300	8·1918	8.5068	8.8219	9·1370	9.4521	2300
2400	8·5479	8.8767	9.2055	9·5342	9.8630	2400
2500	8·9041	9.2466	9.5890	9·9315	10.2740	2500
2600	9·2603	9.6164	9·9726	10·3288	10.6849	2600
2700	9·6164	9.9863	10·3562	10·7260	11.0959	2700
2800	9·9726	10.3562	10·7397	11·1233	11.5068	2800
2900	10·3288	10.7260	11·1233	11·5205	11.9178	2900
3000	10·6849	11.0959	11·5068	11·9178	12.3288	3000
3100	11·0411	11.4658	11·8904	12·3151	12·7397	3100
3200	11·3973	11.8356	12·2740	12·7123	13·1507	3200
3300	11·7534	12.2055	12·6575	13·1096	13·5616	3300
3400	12·1096	12.5753	13·0411	13·5068	13·9726	3400
3500	12·4658	12.9452	13·4247	13·9041	14·3836	3500
3600	12.8219	13·3151	13.8082	14·3014	14·7945	3600
3700	13.1781	13·6849	14.1918	14·6986	15·2055	3700
3800	13.5342	14·0548	14.5753	15·0959	15·6164	3800
3900	13.8904	14·4247	14.9589	15·4932	16·0274	3900
4000	14.2466	14·7945	15.3425	15·8904	16·4384	4000
4100	14·6027	15·1644	15·7260	16·2877	16.8493	4100
4200	14·9589	15·5342	16·1096	16·6849	17.2603	4200
4300	15·3151	15·9041	16·4932	17·0822	17.6712	4300
4400	15·6712	16·2740	16·8767	17·4795	18.0822	4400
4500	16·0274	16·6438	17·2603	17·8767	18.4932	4500
4600	16·3836	17 · 01 37	17.6438	18·2740	18·9041	4600
4700	16·7397	17 · 38 36	18.0274	18·6712	19·3151	4700
4800	17·0959	17 · 75 34	18.4110	19·0685	19·7260	4800
4900	17·4521	18 · 12 33	18.7945	19·4658	20·1370	4900
5000	17·8082	18 · 49 32	19.1781	19·8630	20·5479	5000

Add or capital for 99-103 days. Add or capital for 172-176 days. For explanation see pp. (29-31).

30, 103, 176, 249, 322 Days

Capital	26 99 172 245 318	27 100 173 246 319	28 101 174 247 320	29 102 175 248 321	30 103 176 249 322	Capita1
£ 5100 5200 5300 5400 5500	£ 18·1644 18·5205 18·8767 19·2329 19·5890	£ 18.8630 19.2329 19.6027 19.9726 20.3425	£ 19.5616 19.9452 20.3288 20.7123 21.0959	£ 20·2603 20·6575 21·0548 21·4521 21·8493	£ 20.9589 21.3699 21.7808 22.1918 22.6027	£ 5100 5200 5300 5400 5500
5600	19·9452	20·7123	21·4795	22·2466	23·0137	5600
5700	20·3014	21·0822	21·8630	22·6438	23·4247	5700
5800	20·6575	21·4521	22·2466	23·0411	23·8356	5800
5900	21·0137	21·8219	22·6301	23·4384	24·2466	5900
6000	21·3699	22·1918	23·0137	23·8356	24·6575	6000
6100	21.7260	22·5616	23·3973	24·2329	25.0685	6100
6200	22.0822	22·9315	23·7808	24·6301	25.4795	6200
6300	22.4384	23·3014	24·1644	25·0274	25.8904	6300
6400	22.7945	23·6712	24·5479	25·4247	26.3014	6400
6500	23.1507	24·0411	24·9315	25·8219	26.7123	6500
6600 6700 6800 6900 7000	23·5068 23·8630 24·2192 24·5753 24·9315	24.7808 25.1507 25.5205 25.8904	25.3151 25.6986 26.0822 26.4658 26.8493	26·2192 26·6164 27·0137 27·4110 27·8082	27·1233 27·5342 27·9452 28·3562 28·7671	6600 6700 6800 6900 7000
7100	25·2877	26·2603	27·2329	28·2055	29·1781	7100
7200	25·6438	26·6301	27·6164	28·6027	29·5890	7200
7300	26·0000	27·0000	28·0000	29·0000	30·0000	7300
7400	26·3562	27·3699	28·3836	29·3973	30·4110	7400
7500	26·7123	27·7397	28·7671	29·7945	30·8219	7500
7600 7700 7800 7900 8000	27.0685 27.4247 27.7808 28.1370 28.4932	28·1096 28·4795 28·8493 29·2192 29·5890	29·1507 29·5342 29·9178 30·2014 30·6849	30·1918 30·5890 30·9863 31·3836 31·7808	31·6438 32·0548 32·4658 32·8767	7600 7700 7800 7900 8000
8100	28·8493	29·9589	31.0685	32·1781	33·2877	8100
8200	29·2055	30·3288	31.4521	32·5753	33·6986	8200
8300	29·5616	30·6986	31.8356	32·9726	34·1096	8300
8400	29·9178	31·0685	32.2192	33·3699	34·5205	8400
8500	30·2740	31·4384	32.6027	33·7671	34·9315	8500
8600	30.6301	31·8082	32·9863	34·1644	35·3425	8600
8700	30.9863	32·1781	33·3699	34·5616	35·7534	8700
8800	31.3425	32·5479	33·7534	34·9589	36·1644	8800
8900	31.6986	32·9178	34·1370	35·3562	36·5753	8900
9000	32.0548	33·2877	34·5205	35·7534	36·9863	9000
9100	32·4110	33.6575	34·9041	36·1507	37·3973	9100
9200	32·7671	34.0274	35·2877	36·5479	37·8082	9200
9300	33·1233	34.3973	35·6712	36·9452	38·2192	9300
9400	33·4795	34.7671	36·0548	37·3425	38·6301	9400
9500	33·8356	35.1370	36·4384	37·7397	39·0411	9500
9600	34·1918	35·5068	36·8219	38·1370	39·4521	9600
9700	34·5479	35·8767	37·2055	38·5342	39·8630	9700
9800	34·9041	36·2466	37·5890	38·9315	40·2740	9800
9900	35·2603	36·6164	37·9726	39·3288	40·6849	9900
10,000	35·6164	36·9863	38·3562	39·7260	41·0959	10,000

Add ·03 capital for 245-249 days. Add ·04 capital for 318-322 days.

31, 104, 177, 250, 323 Days

Capital	31 104 177 250 323	32 105 178 251 324	33 106 179 252 325	34 107 180 253 326	35 108 181 254 327	Capital
£ 100 200 300 400 500	£ •4247 •8493 1•2740 1•6986 2•1233	£ •4384 •8767 1•3151 1•7534 2•1918	£ .4521 .9041 1.3562 1.8082 2.2603	£ •4658 •9315 1•3973 1•8630 2•3288	£ '4795 '9589 1'4384 1'9178 2'3973	£ 100 200 300 400 500
600	2·5479	2.6301	2·7123	2·7945	2·8767	600
700	2·9726	3.0685	3·1644	3·2603	3·3562	700
800	3·3973	3.5068	3·6164	3·7260	3·8356	800
900	3·8219	3.9452	4·0685	4·1918	4·3151	900
1000	4·2466	4.3836	4·5205	4·6575	4·7945	1000
1100	4·6712	4·8219	4·9726	5.1233	5·2740	1100
1200	5·0959	5·2603	5·4247	5.5890	5·7534	1200
1300	5·5205	5·6986	5·8767	6.0548	6·2329	1300
1400	5·9452	6·1370	6·3288	6.5205	6·7123	1400
1500	6·3699	6·5753	6·7808	6.9863	7·1918	1500
1700 1800 1900 2000 2100	6·7945 7·2912 7·6438 8·0685 8·4932	7.0137 7.4521 7.8904 8.3288 8.7671	7·2329 7·6849 8·1370 8·5890 9·0411	7:4521 7:9178 8:3836 8:8493 9:3151	7.6712 8.1507 8.6301 9.1096 9.5890	1700 1800 1900 2000
2200 2300 2400 2500	8·9178 9·3425 9·7671 10·1918 10·6164	9·2055 9·6438 10·0822 10·5205 10·9589	9:4932 9:9452 10:3973 10:8493 11:3014	9·7808 10·2466 10·7123 11·1781 11·6438	10·0685 10·5479 11·0274 11·5068 11·9863	2200 2300 2400 2500
2600 2700 2800 2900 3000	11.4658 11.8904 12.3151 12.7397	11·3973 11·8356 12·2740 12·7123 13·1507	11.7534 12.2055 12.6575 13.1096 13.5616	12·1096 12·5753 13·0411 13·5068 13·9726	12·4658 12·9452 13·4247 13·9041 14·3836	2600 2700 2800 2900 3000
3100	13·1644	13·5890	14.0137	14·4384	14.8630	3100
3200	13·5890	14·0274	14.4658	14•9041	15.3425	3200
3300	14·0137	14·4658	14.9178	15·3699	15.8219	3300
3400	14·4384	14·9041	15.3699	15·8356	16.3014	3400
3500	14·8630	15·3425	15.8219	16·3014	16.7808	3500
3600	15·2877	15.7808	16·2740	16·7671	17·2603	3600
3700	15·7123	16.2192	16·7260	17·2329	17·7397	3700
3800	16·1370	16.6575	17·1781	17·6986	18·2192	3800
3900	16·5616	17.0959	17·6301	18·1644	18·6986	3900
4000	16·9863	17.5342	18·0822	18·6301	19·1781	4000
4100	17·4110	17·9726	18.5342	19.0959	19.6575	4100
4200	17·8356	18·4110	18.9863	19.5616	20.1370	4200
4300	18·2603	18·8493	19.4384	20.0274	20.6164	4300
4400	18·6849	19·2877	19.8904	20.4932	21.0959	4400
4500	19·1096	19·7260	20.3425	20.9589	21.5753	4500
4600	19·5342	20·1644	20.7945	21·4247	22·0548	4600
4700	19·9589	20·6027	21.2466	21·8904	22·5342	4700
4800	20·3836	21·0411	21.6986	22·3562	23·0137	4800
4900	20·8082	21·4795	22.1507	22·8219	23·4532	4900
5000	21·2329	21·9178	22.6027	23·2877	23·9726	5000

Add ·01 capital for 104-108 days. Add ·02 capital for 177-181 days. For explanation see pp. (29-31).

35, 108, 181, 254, 327 Days

Capital	31 104 177 250 323	32 105 178 251 324	33 106 179 252 325	34 107 180 253 326	35 108 181 254 327	Capital
£ 5100 5200 5300 5400 5500	£ 21.6575 22.0822 22.5068 22.9315 23.3562	£ 22.3562 22.7945 23.2329 23.6712 24.1096	£ 23.0548 23.5068 23.9589 24.4110 24.8630	£ 23.7534 24.2192 24.6849 25.1507 25.6164	£ 24.4521 24.9315 25.4110 25.8904 26.3699	£ 5100 5200 5300 5400 5500
5600	23·7808	24·5479	25·3151	26·0822	26·8493	5600
5700	24·2055	24·9863	25·7671	26 5479	27·3288	5700
5800	24·6301	25·4247	26·2192	27·0137	27·8082	5800
5900	25·0548	25·8630	26·6712	27·4795	28·2877	5900
6000	25·4795	26·3014	27·1233	27·9452	28·7671	6000
6100	25·9041	26·7397	27.5753	28·4110	29·2466	6100
6200	26·3288	27·1781	28.0274	28·8767	29·7260	6200
6300	26·7534	27·6164	28.4795	29·3425	30·2055	6300
6400	27 1781	28·0548	28.9315	29·8082	30·6849	6400
6500	27·6027	28·4932	29.3836	30·2740	31·1644	6500
6600 6700 6800 6900 7000	28·0274 28·4521 28·8767 29·3014 29·7260	28·9315 29·3699 29·8082 30·2466 30·6849	29·8356 30·2877 30·7397 31·1918 31·6438	30·7397 31·2055 31·6712 32·1370 32·6027	31 6438 32·1233 32·6027 33·0822 33·5616	6700 6800 6900 7000
7100 7200 7300 7400 7500	30·1507 30·5753 31·0000 31·4247 31·8493	31·1233 31·5616 32·0000 32·4384 32·8767	32·0959 32·5479 33·0000 33·4521 33·9041	33.5342 34.0000 34.4658 34.9315	34.5205 35.0000 35.4795 35.9589	7200 7300 7400 7500 7600
7600 7700 7800 7900 8000	32.2740 32.6986 33.1233 33.5479 33.9726	33·3151 33·7534 34·1918 34·6301 35·0685	34·3562 34·8082 35·2603 35·7123 36·1644	35·3973 35·8630 36·3288 36·7945 37·2603	36·4384 36·9178 37·3973 37·8767 38·3562	7700 7800 7900 8000
8100	34·3973	35·5068	36.6164	37·7260	38.8356	8100
8200	34·8219	35·9452	37.0685	38·1918	39.3151	8200
8300	35·2466	36·3836	37.5205	38·6575	39.7945	8300
8400	35·6712	36·8219	37.9726	39·1233	40.2740	8400
8500	36·0959	37·2603	38.4247	39·5890	40.7534	8500
8600	36·5205	37.6986	38·8767	40·0548	41·2329	8600
8700	36·9452	38.1370	39·3288	40·5205	41·7123	8700
8800	37·3699	38.5753	39·7808	40·9863	42·1918	8800
8900	37·7945	39.0137	40·2329	41·4521	42·6712	8900
9000	38·2192	39.4521	40·6849	41·9178	43·1507	9000
9100	38.6438	39·8904	41·1370	42·3836	43.6301	9100
9200	39.0685	40·3288	41·5890	42·8493	44.1096	9200
9300	39.4932	40·7671	42·0411	43·3151	44.5890	9300
9400	39.9178	41·2055	42·4932	43·7808	45.0685	9400
9500	40.3425	41·6438	42·9452	44·2466	45.5479	9500
9600	40·7671	42.0822	43·3973	44.7123	46.0274	9600
9700	41·1918	42.5205	43·8493	45.1781	46.5068	9700
9800	41·6164	42.9589	44·3014	45.6438	46.9863	9800
9900	42·0411	43.3973	44·7534	46.1096	47.4658	9900
10,000	42·4658	43.8356	45·2055	46.5753	47.9452	10,000

Add o3 capital for 250-254 days. Add o4 capital for 323-327 days.

36, 109, 182, 255, 328 Days

	90	97	20	39	40	
Capital	36 109 182 255 328	37 110 183 256 329	38 111 184 257 330	112 185 258 331	113 186 259 332	Capital
£ 100 200 300 400 500	£ ·4932 ·9863 1·4795 1·9726 2·4658	£ •5068 1•0137 1•5205 2•0274 2•5342	£ •5205 1•0411 1•5616 2•0822 2•6027	£ ·5342 1·0685 1·6027 2·1370 2·6712	£ ·5479 I·0959 I·6438 2·1918 2·7397	£ 100 200 300 400 500
600 700 800 900 1 000	2·9589 3·4521 3·9452 4·4384 4·9315	3.5479 4.0548 4.5616 5.0685	3·1233 3·6438 4·1644 4·6849 5·2055	3·2055 3·7397 4·2740 4·8082 5·3425	3·2877 3·8356 4·3836 4·9315 5·4795	600 700 800 900 1000
1100	5.4247	5·5753	5.7260	5.8767	6·0274	1100
1200	5.9178	6·0822	6.2466	6.4110	6·5753	1200
1300	6.4110	6·5890	6.7671	6.9452	7·1233	1300
1400	6.9041	7·0959	7.2877	7.4795	7·6712	1400
1500	7.3973	7·6027	7.8082	8.0137	8·2192	1500
1600	7.8904	8·1096	8·3288	8·5479	8.7671	1600
1700	8.3836	8·6164	8·8493	9·0822	9.3151	1700
1800	8.8767	9·1233	9·3699	9·6164	9.8630	1800
1900	9.3699	9·6301	9·8904	10·1507	10.4110	1900
2000	9.8630	10·1370	10·4110	10·6849	10.9589	2000
2100	10·3562	10.6438	10·9315	11·219 2	11·5068	2100
2200	10·8493	11.1507	11·4521	11·7534	12·0548	2200
2300	11·3425	11.6575	11·9726	12·28 7 7	12·6027	2300
2400	11·8356	12.1644	12·4932	12·8219	13·1507	2400
2500	12·3288	12.6712	13·0137	13·3562	13·6986	2500
2600 2700 2800 2900 3000	12·8219 13·3151 13·8082 14·3014 14·7945	13·1781 13·6849 14·1918 14·6986	13.5342 14.0548 14.5753 15.0959 15.6164	13.8904 14.4247 14.9589 15.4932 16.0274	14·2466 14·7945 15·3425 15·8904 16·4384	2600 2700 2800 2900 3000
3100	15·2877	15·7123	16·1370	16·5616	16·9863	3100
3200	15·7808	16·2192	16·6575	17 0959	17·5342	3200
3300	16·2740	16·7260	17·1781	17·6301	18·0822	3300
3400	16·7671	17·2329	17·6986	18·1644	18·6301	3400
3500	17·2603	17·7397	18·2192	18·6986	19·1781	3500
3600	17·7534	18·2466	18.7397	19·2329	19·7260	3600
3700	18·2466	18·7534	19.2603	19·7671	20·2740	3700
3800	18·7397	19·2603	19.7808	20·3014	20·8219	3800
3900	19·2329	19·7671	20.3014	20·8356	21·3699	3900
4000	19·7260	20·2740	20.8219	21·3699	21·9178	4000
4100	20·2192	20·7808	21·3425	21·9041	22·4658	4100
4200	20·7123	21·2877	21·8630	22·4384	23·0137	4200
4300	21·2055	21·7945	22·3836	22·9726	23·5616	4300
4400	21·6986	22·3014	22·9041	23·5068	24·1096	4400
4500	22·1918	22·8082	23·4247	24·0411	24·6575	4500
4600	22.6849	23·3151	23·945 2 24·4658 24·9863 25·5068 26·0274	24.5753	25·2055	4600
4700	23.1781	23·8219		25.1096	25·7534	4700
4800	23.6712	24·3288		25.6438	26·3014	4800
4900	24.1644	24·8356		26.1781	26·8493	4900
5000	24.6575	25·3425		26.7123	27·3973	5000

Add ·01 capital for 109-113 days. Add ·02 capital for 182-186 days. For explanation see pp. (29-31).

40, 113, 186, 259, 332 Days

Capital	36 109 182 255 328	37 110 183 256 329	38 111 184 257 330	39 112 185 258 331	40 113 186 259 332	Capital
5100 5200 5300 5400 5500	£ 25.1507 25.6438 26.1370 26.6301 27.1233	£ 25.8493 26.3562 26.8630 27.3699 27.8767	£ 26.5479 27.0685 27.5890 28.1096 28.6301	£ 27.2466 27.7808 28.3151 28.8493 29.3836	£ 27.9452 28.4932 29.0411 29.5890 30.1370	£ 5100 5200 5300 5400 5500
5600	27.6164	28·3836	29·1507	29·9178	30.6849	5600
5700	28.1096	28·8904	29·6712	30·4521	31.2329	5700
5800	28.6027	29·3973	30·1918	30·9863	31.7808	5800
5900	29.0959	29·9041	30·7123	31·5205	32.3288	5900
6000	29.5890	30·4110	31·2329	32·0548	32.8767	6000
6100	30·0822	30·9178	31.7534	32·5890	33·4247	6100
6200	30·5753	31·4247	32.2740	33·1233	33·9726	6200
6300	31·0685	31·9315	32.7945	33·6575	34·5205	6300
6400	31·5616	32·4384	33.3151	34·1918	35·0685	6400
6500	32·0548	32·9452	33.8356	34·7260	35·6164	6500
6600	32·5479	33·4521	34·3562	35·2603	36·1644	6600
6700	33·0411	33·9589	34·8767	35·7945	36·7123	6700
6800	33·5342	34·4658	35·3973	36·3288	37·2603	6800
6900	34·0274	34·9726	35·9178	36·8630	37·8082	6900
7000	34·5205	35·4795	36·4384	37·3973	38·3562	7000
7100 7200 7300 7400 7500	35.5068 36.0000 36.4932 36.9863	35·9863 36·4932 37·0000 37·5068 38·0137	36·9589 37·4795 38·0000 38·5205 39·0411	37.9315 38.4658 39.0000 39.5342 40.0685	38·9041 39·4521 40·0000 40·5479 41·0959	7100 7200 7300 7400 7500
7600	37·4795	38·5205	39·5616	40·6027	41.6438	7600
7700	37·9726	39·0274	40·0822	41·1370	42.1918	7700
7800	38·4658	39·5342	40·6027	41·6712	42.7397	7800
7900	38·9589	40·0411	41·1233	42·2055	43.2877	7900
8000	39·4521	40·5479	41·6438	42·7397	43.8356	8000
8100	39·9452	41.0548	42·1644	43·2740	44·3836	8100
8200	40·4384	41.5616	42·6849	43·8082	44·9315	8200
8300	40·9315	42.0685	43·2055	44·3425	45·4795	8300
8400	41·4247	42.5753	43·7260	44·8767	46·0274	8400
8500	41·9178	43.0822	44·2466	45·4110	46·5753	8500
8600	42·4110	43.5890	44·7671	45·9452	47·1233	8600
8700	42·9041	44.0959	45·2877	46·4795	47·6712	8700
8800	43·3973	44.6027	45·8082	47·0137	48·2192	8800
8900	43·8904	45.1056	46·3288	47·5479	48·7671	8900
9000	44·3836	45.6164	46·8493	48·0822	49·3151	9000
9100	44·8767	46·1233	47·3699	48.6164	49.8630	9100
9200	45·3699	46·6301	47·8904	49.1507	50.4110	9200
9300	45·8630	47·1370	48·4110	49.6849	50.9589	9300
9400	46·3562	47·6438	48·9315	50.2192	51.5068	9400
9500	46·8493	48·1507	49·4521	50.7534	52.0548	9500
9600	47·3425	48.6575	49·9726	51·2877	52.6027	9600
9700	47·8356	49.1644	50·4932	51·8219	53.1507	9700
9800	48·3288	49.6712	51·0137	52·3562	53.6986	9800
9900	48·8219	50.1781	51·5342	52·8904	54.2466	9900
10,000	49·3151	50.6849	52·0548	53·4247	54.7945	10,000

Add ·03 capital for 255-259 days. Add ·04 capital for 328-332 days.

41, 114, 187, 260, 333 Days

Capital	41 114 187 260 333	42 115 188 261 334	43 116 189 262 335	44 117 190 263 336	45 118 191 264 337	Capital
£ 100 200 300 400 500	£ •5616 1•1233 1•6849 2•2466 2•8082	£ *5753 1.1507 1.7260 2.3014 2.8767	£ •5890 1•1781 1•7671 2•3562 2•9452	£ •6027 1·2055 1·8082 2·4110 3·0137	£ .6164 1.2329 1.8493 2.4658 3.0822	£ 100 200 300 400 500
600	3·3699	3:4521	3:5342	3.6164	3.6986	600
700	3·9315	4:0274	4:1233	4.2192	4.3151	700
800	4·4932	4:6027	4:7123	4.8219	4.9315	800
900	5·0548	5:1781	5:3014	5.4247	5.5479	900
1000	5·6164	5:7534	5:8904	6.0274	6.1644	1000
1100	6·1781	6·3288	6·4795	6.6301	6·7808	1100
1200	6·7397	6·9041	7·0685	7.2329	7·3973	1200
1300	7·3014	7·4795	7·6575	7.8356	8·0137	1300
1400	7·8630	8·0548	8·2466	8.4384	8·6301	1400
1500	8·4247	8·6301	8·8356	9.0411	9·2466	1500
1600	8·9863	9·2055	9·4247	9.6438	9.8630	1600
1700	9·5479	9·7808	10·0137	10.2466	10.4795	1700
1800	10·1096	10·3562	10·6027	10.8493	11.0959	1800
1900	10·6712	10·9315	11·1918	11.4521	11.7123	1900
2000	11·2329	11·5068	11·7808	12.0548	12.3288	2000
2100	11.7945	12.0822	12·3699	12.6575	12·9452	2100
2200	12.3562	12.6575	12·9589	13.2603	13·5616	2200
2300	12.9178	13.2329	13·5479	13.8630	14·1781	2300
2400	13.4795	13.8082	14·1370	14.4658	14·7945	2400
2500	14.0411	14.3836	14·7260	15.0685	15·4110	2500
2600	14·6027	14.9589	15-3151	15.6712	16·0274	2600
2700	15·1644	15.5342	15-9041	16.2740	16·6438	2700
2800	15·7260	16.1096	16-4932	16.8767	17·2603	2800
2900	16·2877	16.6849	17-0822	17.4795	17·8767	2900
3000	16·8493	17.2603	17-6712	18.0822	18·4932	3000
3100	17·4110	17.8356	18.2603	18.6849	19·1096	3100
3200	17·9726	18.4110	18.8493	19.2877	19·7260	3200
3300	18·5342	18.9863	19.4384	19.8904	20·3425	3300
3400	19·0959	19.5616	20.0274	20.4932	20·9589	3400
3500	19·6575	20.1370	20.6164	21.0959	21·5753	3500
3600	20·2192	20·7123	21·2055	21.6986	22·1918	3600
3700	20·7808	21·2877	21·7945	22.3014	22·8082	3700
3800	21·3425	21·8630	22·3836	22.9041	23·4247	3800
3900	21·9041	22·4384	22·9726	23.5068	24·0411	3900
4000	22·4658	23·0137	23·5616	24.1096	26·4575	4000
4100	23.0274	23·5890	24·1507	24·7123	25·2740	4100
4200	23.5890	24·1644	24·7397	25·3151	25·8904	4200
4300	24.1507	24·7397	25·3288	25·9178	26·5068	4300
4400	24.7123	25·3151	25·9178	26·5205	27·1233	4400
4500	25.2740	25·8904	26·5c68	27·1233	27·7397	4500
4600	25·8356	26·4658	27.0959	27·7260	28·3562	4600
4700	26·3973	27·0411	27.6849	28·3288	28·9726	4700
4800	26·9589	27·6164	28.2740	28·9315	29·5890	4800
4900	27·5205	28·1918	28.8630	29·5342	30·2055	4900
5000	28·0822	28·7671	29.4521	30·1370	30·8219	5000

Add \cdot 01 capital for 114–118 days. Add \cdot 02 capital for 187–191 days. For explanation see pp. (29–31).

45, 118, 191, 264, 337 Days

Capital	41 114 187 260 333	42 115 188 261 334	43 116 189 262 335	44 117 190 263 336	45 118 191 264 337	Capital
5100 5200 5300 5400 5500	£ 28.6438 29.2055 29.7671 30.3288 30.8904	£ 29.3425 29.9178 30.4932 31.0685 31.6438	£ 30.0411 30.6301 31.2192 31.8082 32.3973	£ 30.7397 31.3425 31.9452 32.5479 33.1507	£ 31.4384 32.0548 32.6712 33.2877 33.9041	£ 5100 5200 5300 5400 5500
5600	31·4521	32·2192	32·9863	33·7534	34·5205	5600
5700	32·0137	32·7945	33·5753	34·3562	35·1370	5700
5800	32·5753	33·3699	34·1644	34·9589	35·7534	5800
5900	33·1370	33·9452	34·7534	35·5616	36·3699	5900
6000	33·6986	34·5205	35·3425	36·1644	36·9863	6000
6100	34·2603	35.0959	35.9315	36·7671	37.6027	6100
6200	34·8219	35.6712	36.5205	37·3699	38.2192	6200
6300	35·3836	36.2466	37.1096	37·9726	38.8356	6300
6400	35·9452	36.8219	37.6986	38·5753	39.4521	6400
6500	36·5068	37.3973	38.2877	39·1781	40.0685	6500
6600	37.0685	37·9726	38·8767	39·7808	40.6849	6600
6700	37.6301	38·5479	39·4658	40·3836	41.3014	6700
6800	38.1918	39·1233	40·0548	40·9863	41.9178	6800
6900	38.7534	39·6986	40·6438	41·5890	42.5342	6900
7000	39.3151	40·2740	41·2329	42·1918	43.1507	7000
7100	39·8767	40·8493	41.8219	42·7945	43.7671	7100
7200	40·4384	41·4247	42.4110	43·3973	44.3836	7200
7300	41·0000	42·0000	43.0000	44·0000	45.0000	7300
7400	41·5616	42·5753	43.5890	44·6027	45.6164	7400
7500	42·1233	43·1507	44.1781	45·2055	46.2329	7500
7600	42.6849	43.7260	44.7671	45.8082	46·8493	7600
7700	43.2466	44.3014	45.3562	46.4110	47·4658	7700
7800	43.8082	44.8767	45.9452	47.0137	48·0822	7800
7900	44.3699	45.4521	46.5342	47.6164	48·6986	7900
8000	44.9315	46.0274	47.1233	48.2192	49·3151	8000
8100	45.4932	46.6027	47.7123	48·8219	49.9315	8100
8200	46.0548	47.1781	48.3014	49·4247	50.5479	8200
8300	46.6164	47.7534	48.8904	50·0274	51.1644	8300
8400	47.1781	48.3288	49.4795	50·6301	51.7808	8400
8500	47.7397	48.9041	50.0685	51·2329	52.3973	8500
8600	48·3014	49·4795	50·6575	51·8356	53.0137	8600
8700	48·8630	50·0548	51·2466	52·4384	53.6301	8700
8800	49·4247	50·6301	51·8356	53·0411	54.2466	8800
8900	49·9863	51·2055	52·4247	53·6438	54.8630	8900
9000	50·5479	51·7808	53·0137	54·2466	55.4795	9000
9100	51·1096	52·3562	53·6027	54·8493	56·0959	9100
9200	51·6712	52·9315	54·1918	55·4521	56·7123	9200
9300	52·2329	53·5068	54·7808	56·0548	57·3288	9300
9400	52·7945	54·0822	55·3699	56·6578	57·9452	9400
9500	53·3562	54·6575	55·9589	57·2603	58·5616	9500
9600	53·9178	55·2329	56·5479	57.8630	59·1781	9600
9700	54·4795	55·8082	57·1370	58.4658	59·7945	9700
9800	55·0411	56·3836	57·7260	59.0685	60·4110	9800
9900	55·6027	56·9589	58·3151	59.6712	61·0274	9900
10,000	56·1644	57·5342	58·9041	60.2740	61·6438	10,000

Add ·03 capital for 260-264 days. Add ·04 capital for 333-337 days.

46, 119, 192, 265, 338 Days

			*			
Capital	46 119 192 265 338	47 120 193 266 339	48 121 194 267 340	49 122 - 195 268 341	50 123 196 269 342	Capital
£	£ .6301 1 2603 1.8904 2.5205 3.1507	£	£	£	£	£
100		·6438	.6575	.6712	.6849	100
200		1·2877	1.3151	1.3425	1.3699	200
300		1·9315	1.9726	2.0137	2.0548	300
400		2·5753	2.6301	2.6849	2.7397	400
500		3·2192	3.2877	3.3562	3.4247	500
600	3.7808	3·8630	3·9452	4·0274	4·1096	600
700	4.4110	4·5068	4·6027	4·6986	4·7945	700
800	5.0411	5 1507	5·2603	5·3699	5·4795	800
900	5.6712	5·7945	5·9178	6·0411	6·1644	900
1000	6.3014	6·4384	6·5753	6·7123	6·8493	1000
1100	6·9315	7.0822	7·2329	7·3836	7·5342	1100
1200	7·5616	7.7260	7·8904	8·0548	8·2192	1200
1300	8·1918	8.3699	8·5479	8·7260	8·9041	1300
1400	8·8219	9.0137	9·2055	9·3973	9·5890	1400
1500	9·4521	9.6575	9·8630	10·0685	10·2740	1500
1600	10·0822	10·3014	10·5205	10·7397	10·9589	1600
1700	10·7123	10·9452	11·1781	11·4110	11·6438	1700
1800	11·3425	11·5890	11·8356	12·0822	12·3288	1800
1900	11·9726	12·2329	12·4932	12·7534	13·0137	1900
2000	12·6027	12·8767	13·1507	13·4247	13·6986	2000
2100	13·2329	13·5205	13.8082	14·0959	14·3836	2100
2200	13·8630	14·1644	14.4658	14·7671	15·0685	2200
2300	14·4932	14·8082	15.1233	15·4384	15·7534	2300
2400	15·1233	15·4521	15.7808	16·1096	16·4384	2400
2500	15·7534	16·0959	16.4384	16·7808	17·1233	2500
2600	16·3836	16·7397	17.5959	17·4521	17·8082	2600
2700	17·0137	17·3836	17.7534	18·1233	18·4932	2700
2800	17·6438	18·0274	18.4110	18·7945	19·1781	2800
2900	18·2740	18·6712	19.0685	19·4658	19·8630	2900
3000	18·9041	19·3151	19.7260	20·1370	20·5479	3000
3100	19·5342	19·9589	20·3836	20·8082	21·2329	3100
3200	20·1644	20·6027	21·0411	21·4795	21·9178	3200
3300	20·7945	21·2466	21·6986	22·1507	22·6027	3300
3400	21·4247	21·8904	22·3562	22·8219	23·2877	3400
3500	22·0548	22·5342	23·0137	23·4932	23·9726	3500
3600	22.6849	23·1781	23·6712	24·1644	24.6575	3600
3700	23.3151	23·8219	24·3288	24·8356	25.3425	3700
3800	23.9452	24·4658	24·9863	25·5068	26.0274	3800
3900	24.5753	25·1096	25·6438	26·1781	26.7123	3900
4000	25.2055	25·7534	26·3014	26·8493	27.3973	4000
4100	25·8356	26·3973	26·9589	27·5205	28·0822	4100
4200	26·4658	27·0411	27·6164	28·1918	28·7671	4200
4300	27·0959	27·6849	28·2740	28·8630	29·4521	4300
4400	27·7260	28·3288	28·9315	29·5342	30·1370	4400
4500	28·3562	28·9726	29·5890	30·2055	30·8219	4500
4600	28·9863	29·6164	30·2466	30·8767	31·5068	4600
4700	29·6164	30·2603	30·9041	31·5479	32·1918	4700
4800	30·2466	30·9041	31·5616	32·2192	32·8767	4800
4900	30·8767	31·5479	32·2192	32·8904	33·5616	4900
5000	31·5068	32·1918	32·8767	33·5616	34·2466	5000

Add ·o1 capital for 119-123 days. Add ·o2 capital for 192-196 days. For explanation see pp. (29-31).

50, 123, 196, 269, 342 Days

Capital	46 119 192 265 338	47 120 193 266 339	48 121 194 267 340	49 122 195 268 341	50 123 196 269 342	Capital
£ 5100 5200 5300 5400 5500	£ 32·1370 32·7671 33·3973 34·0274 34·6575	£ 32.8356 33.4795 34.1233 34.7671 35.4110	£ 33.5342 34.1918 34.8493 35.5068 36.1644	£ 34.2329 34.9041 35.5753 36.2466 36.9178	£ 34.9315 35.6164 36.3014 36.9863 37.6712	£ 5100 5200 5300 5400 5500
5600	35·2877	36.0548	36·8219	37.5890	38·3562	5600
5700	35·9178	36.6986	37·4795	38.2603	39·0411	5700
5800	36·5479	37.3425	38·1370	38.9315	39·7260	5800
5900	37·1781	37.9863	38·7945	39.6027	40·4110	5900
6000	37·8082	38.6301	39·4521	40.2740	41·0959	6000
6100	38·4384	39·2740	40·1096	40.9452	41.7808	6100
6200	39·0685	39·9178	40·7671	41.6164	42.4658	6200
6300	39·6986	40·5616	41·4247	42.2877	43.1507	6300
6400	40·3288	41·2055	42·0822	42.9589	43.8356	6400
6500	40·9589	41·8493	42·7397	43.6301	44.5205	6500
6600	41·5890	42·4932	43°3973	44·3014	45.2055	6600
6700	42·2192	43·1370	44°0548	44·9726	45.8904	6700
6800	42·8493	43·7808	44°7123	45 6438	46.5753	6800
6900	43·4795	44·4247	45°3699	46·3151	47.2603	6900
7000	44·1096	45·0685	46°0274	46·9863	47.9452	7000
7100	44.7397	45.7123	46.6849	47.6575	48.6301	7100
7200	45.3699	46.3562	47.3425	48.3288	49.3151	7200
7300	46.0000	47.0000	48.0000	49.0000	50.0000	7300
7400	46.6301	47.6438	48.6575	49.6712	50.6849	7400
7500	47.2603	48.2877	49.3151	50.3425	51.3699	7500
7600	47·8904	48.9315	49·9726	51.0137	52·0548	7600
7700	48·5205	49.5753	50·6301	51.6849	52·7397	7700
7800	49·1507	50.2192	51·2877	52.3562	53·4247	7800
7900	49·7808	50.8630	51·9452	53.0274	54·1096	7900
8000	50·4110	51.5068	52·6027	53.6986	5 4·7945	8000
8100	51.0411	52·1507	53·2603	54·3699	55.4795	8100
8200	51.6712	52·7945	53·9178	55·0411	56.1644	8200
8300	52.3014	53·4384	54·5753	55·7123	56.8493	8300
8400	52.9315	54·0822	55·2329	56·3836	57.5342	8400
8500	53.5616	54·7260	55·8904	57·0548	58.2192	8500
8600	54·1918	55·3699	56·5479	57·7260	58·9041	8600
8700	54·8219	56·0137	57·2055	58·3973	59·5890	8700
8800	55·4521	56·6575	57·8630	59·0685	60·2740	8800
8900	56·0822	57·3014	58·5205	59·7397	60·9589	8900
9000	56·7123	57·9452	59·1781	60·4110	61·6438	9000
9100	57·3425	58·5890	59·8356	61.0822	62·3288	9100
9200	57·9726	59·2329	60·4932	61.7534	63·0137	9200
9300	58·6027	59·8767	61·1507	62.4247	63·6986	9300
9400	59·2329	60·5205	61·8082	63.0959	64·3836	9400
9500	59·8630	61·1644	62·4658	63.7671	65·0685	9500
9600	60·4932	61·8082	63·1233	64·4384	65.7534	9600
9700	61·1233	62·4521	63·7808	65·1096	66.4384	9700
9800	61·7534	63·0959	64·4384	65·7808	67.1233	9800
9900	62·3836	63·7397	65·0959	66·4521	67.8082	9900
10,000	63·0137	64·3836	65·7534	67·1233	68.4932	10,000

Add ·03 capital for 265-269 days. Add ·04 capital for 338-342 days.

51, 124, 197, 270, 343 Days

Capital	51 124 197 270 343	52 125 198 271 344	53 126 199 272 345	54 127 200 273 346	55 128 201 274 347	Capital
£ 100 200 300 400 500	£ .6986 1.3973 2.0959 2.7945 3.4932	£ .7123 1.4247 2.1370 2.8493 3.5616	£ .7260 1.4521 2.1781 2.9041 3.6301	£ '7397 1.4795 2.2192 2.9589 3.6986	£ .7534 1.5068 2.2603 3.0137 3.7671	£ 100 200 300 400 500
600	4·1918	4·2740	4·3562	4.4384	4·5205	600
700	4·8904	4·9863	5·0822	5.1781	5·2740	700
800	5·5890	5·6986	5·8082	5.9178	6·0274	800
900	6·2877	6·4110	6·5342	6.6575	6·7868	900
1000	6·9863	7·1233	7·2603	7.3973	7·5342	1000
1100	7.6849	7.8356	7·9863	8·1370	8·2877	1100
1200	8.3836	8.5479	8·7123	8·8767	9·0411	1200
1300	9.0822	9.2603	9·4384	9·6164	9·7945	1300
1400	9.7808	9.9726	10·1644	10·3562	10·5479	1400
1500	10.4795	10.6849	10·8904	11·0959	11·3014	1500
1600	11·1781	11·3973	11.6164	11.8356	12·0548	1600
1700	11·8767	12·1096	12.3425	12.5753	12·8082	1700
1800	12·5753	12·8219	13.0685	13.3151	13·5616	1800
1900	13·2740	13·5342	13.7945	14.0548	14·3151	1900
2000	13·9726	14·2466	14.5205	14.7945	15·0685	2000
2100 2200 2300 2400 2500	14.6712 15.3699 16.0685 16.7671 17.4658	14·9589 15·6712 16·3836 17·0959 17·8082	15·2466 15·9726 16·6986 17·4247 18·1507	15·5342 16·2740 17·0137 17·7534 1 8·4932	15·8219 16·5753 17·3288 18·0822 18·8356	2200 2300 2400 2500
2600	18·1644	18·5205	18.8767	19·2329	19·5890	2600
2700	18·8630	19·2329	19.6027	19·9726	20·3425	2700
2800	19·5616	19·9452	20.3288	20·7123	21·0959	2800
2900	20·2603	20·6575	21.0548	21·4521	21·8493	2900
3000	20·9589	21·3699	21.7808	22·1918	22·6027	3000
3100	21.6575	22.0822	22·5068	22.9315	23·3562	3100
3200	22.3562	22.7945	23·2329	23.6712	24·1096	3200
3300	23.0548	23.5068	23·9589	24.4110	24·8630	3300
3400	23.7534	24.2192	24·6849	25.1507	25·6164	3400
3500	24.4521	24.9315	25·4110	25.8904	26·3699	3500
3600	25·1507	25.6438	26·1370	26.6301	27·1233	3600
3700	25·8493	26.3562	26·8630	27.3699	27·8767	3700
3800	26·5479	27.0685	27·5890	28.1096	28·6301	3800
3900	27·2466	27.7808	28·3151	28.8493	29·3836	3900
4000	27·9452	28.4932	29·0411	29.5890	30·1370	4000
4100	28·6438	29·2055	29·7671	30·3288	30·8904	4100
4200	29·3425	29·9178	30·4932	31·0685	31·6438	4200
4300	30·0411	30·6301	31·2192	31·8082	32·3973	4300
4400	30·7397	31·3425	31·9452	32·5479	33·1507	4400
4500	31·4384	32·0548	32·6712	33·2877	33·9041	4500
4600	32·1370	32·7671	33·3973	34·0274	34.6575	4600
4700	32·8356	33·4795	34·1233	34·7671	35.4110	4700
4800	33·534 ²	34·1918	34·8493	35·5068	36.1644	4800
4900	34·2329	34·9041	35·5753	36·2466	36.9178	4900
5000	34·9315	35·6164	36·3014	36·9863	37.6712	5000

Add or capital for 124-128 days. Add or capital for 197-201 days. For explanation see pp. (29-31).

55, 128, 201, 274, 347 Days

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Capital	51 124 197 270 343	52 125 198 271 344	53 126 199 272 345	54 127 200 273 346	55 128 201 274 347	Capital
£ 5100 5200 5300 5400 5500	£ 35.6301 36.3288 37.0274 37.7260 38.4247	£ 36.3288 37.0411 37.7534 38.4658 39.1781	£ 37.0274 37.7534 38.4795 39.2055 39.9315	£ 37.7260 38.4658 39.2055 39.9452 40.6849	£ 38.4247 39.1781 39.9315 40.6849 41.4384	£ 5100 5200 5300 5400 5500
5600	39·1233	39·8904	40.6575	41·4247	42·1918	5600
5700	39·8219	40·6027	41.3836	42·1644	42·9452	5700
5800	40·5205	41·3151	42.1096	42·9041	43·6986	5800
5900	41·2192	42·0274	42.8356	43·6438	44·4521	5900
6000	41·9178	42·7397	43.5616	44·3836	45·2055	6000
6100	42.6164	43.4521	44·2877	45.1233	45.9589	6100
6200	43.3151	44.1644	45·0137	45.8630	46.7123	6200
6300	44.0137	44.8767	45·7397	46.6027	47.4658	6300
6400	44.7123	45.5890	46·4658	47.3425	48.2192	6400
6500	45.4110	46.3014	47·1918	48.0822	48.9726	6500
6600	46·1096	47.0137	47.9178	48·8219	49·7260	6600
6700	46·8082	47.7260	48.6438	49·5616	50·4795	6700
6800	47·5068	48.4384	49.3699	50·3014	51·2329	6800
6900	48·2055	49.1507	50.0959	51·0411	51·9863	6900
7000	48·9041	49.8630	50.8219	51·7808	52·7397	7000
7100	49.6027	50·5753	51·5479	52·5205	53°4932	7100
7200	50.3014	51·2877	52·2740	53·2603	54°2466	7200
7300	51.0000	52·0000	53·0000	54·0000	55°0000	7300
7400	51.6986	52·7123	53·7260	54·7397	55°7534	7400
7500	52.3973	53·4247	54·4521	55·4795	56°5068	7500
7600	53.0959	54·1370	55·1781	56·2192	57·2603	7600
7700	53.7945	54·8493	55·9041	56·9589	58·0137	7700
7800	54.4932	55·5616	56·6301	57·6986	58·7671	7800
7900	55.1918	56·2740	57·3562	58·4384	59·5205	7900
8000	55.8904	56·9863	58·0822	59·1781	60·2740	8000
8100	56·5890	57.6986	58·8082	59·9178	61.0274	8100
8200	57·2877	58.4110	59·5342	60·6575	61.7808	8200
8300	57·9863	59.1233	60·2603	61·3973	62.5342	8300
8400	58·6849	59.8356	60·9863	62·1370	63.2877	8400
8500	59·3836	60.5479	61·7123	62·8767	64.0411	8500
8600	60·0822	61·2603	62·4384	63.6164	64·7945	8600
8700	60·7808	61·9726	63·1644	64.3562	65·5479	8700
8800	61·4795	62·6849	63·8904	65.0959	66·3014	8800
8900	62·1781	63·3973	64·6164	65.8356	67·0548	8900
9000	(2·8767	64·1096	65·3425	66.5753	67·8082	9000
9100	63·5753	64·8219	66·0685	67·3151	68·5616	9100
9200	64·2740	65·5342	66·7945	68 0548	69·3151	9200
9300	64·9726	66·2466	67·5205	68·7945	70·0685	9300
9400	65·6712	66·9589	68·2466	69·5342	70·8219	9400
9500	66·3699	67·6712	68·9726	70·2740	71·5753	9500
9600	67.0685	68·3836	69·6986	71·0137	72·3288	9600
9700	67.7671	69·0959	70·4247	71·7534	73·0822	9700
9800	68.4658	69·8082	71·1507	72·4932	73·8356	9800
9900	69.1644	70·5205	71·8767	73·2329	74·5890	9900
10,000	69.8630	71·2329	72·6027	73·9726	75·3425	10,000

Add o3 capital for 270-274 days. Add o4 capital for 343-347 days.

56, 129, 202, 275, 348 Days

Capital	56 129 202 275 348	57 130 203 276 349	58 131 204 277 350	59 132 205 278 351	60 133 206 279 352	Capital
£ 100 200 300 400 500	£ .7671 1.5342 2.3014 3.0685 3.8356	£ .7808 1.5616 2.3425 3.1233 3.9041	£ .7945 1.5890 2.3836 3.1781 3.9726	£ ·8082 1·6164 2·4247 3·2329 4·0411	£ ·8219 1·6438 2·4658 3·2877 4·1096	£ 100 200 300 400 500
600	4.6027	4.6849	4·7671	4·8493	4·9315	600
700	5.3699	5.4658	5·5616	5·6575	5·7534	700
800	6.1370	6.2466	6·3562	6·4658	6·5753	800
900	6.9041	7.0274	7·1507	7·2740	7·3973	900
1000	7.6712	7.8082	7·9452	8·0822	8·2192	1000
1100 1200 1300 1400 1500	8·4384 9·2055 9·9726 10·7397 11·5068	8·5890 9·3699 10·1507 10·9315 11·7123	8·7397 9·5342 10·3288 11·1233 11·9178	8·8904 9·6986 10·5068 11·3151 12·1233	9.8630 10.6849 11.5068 12.3288	1100 1200 1300 1400 1500
1600	12·2740	12·4932	12·7123	12·9315	13·1507	1600
1700	13·0411	13·2740	13·5068	13·7397	13·9726	1700
1800	13·8082	14·0548	14·3014	14·5479	14·7945	1800
1900	14·5753	14·8356	15·0959	15·3562	15·6164	1900
2000	15·3425	15·6164	15·8904	16·1644	16·4384	2000
2100 2200 2300 2400 2500	16·1096 16·8767 17·6438 18·4110	16·3973 17·1781 17·9589 18·7397 19·5205	16.6849 17.4795 18.2740 19.0685 19.8630	16·9726 17·7808 18·5890 19·3973 20·2055	17·2603 18·0822 18·9041 19·7260 20·5479	2100 2200 2300 2400 2500
2600	19·9452	20·3014	20.6575	21·0137	21·3699	2600
2700	20·7123	21·0822	21.4521	21·8219	22·1918	2700
2800	21·4795	21·8630	22.2466	22·6301	23·0137	2800
2900	22·2466	22·6438	23.0411	23·4384	23·8356	2900
3000	23·0137	23·4247	23.8356	24·2466	24·6575	3000
3100	23.7808	24·2055	24.6301	25.0548	25·4795	3100
3200	24.5479	24·9863	25.4247	25.8630	26·3014	3200
3300	25.3151	25·7671	26.2192	26.6712	27·1233	3300
3400	26.0822	26·5479	27.0137	27.4795	27·9452	3400
3500	26.8493	27·3288	27.8082	28.2877	28·7671	3500
3600	27.6164	28·1096	28.6027	29·0959	29·5890	3600
3700	28.3836	28·8904	29.3973	29·9041	30·4110	3700
3800	29.1507	29·6712	30.1918	30·7123	31·2329	3800
3900	29.9178	30·4521	30.9863	31·5205	32·0548	3900
4000	30.6849	31·2329	31.7808	32·3288	32·8767	4000
4100	31·4521	32·0137	32·5753	33·1370	33.6986	4100
4200	32·2192	32·7945	33·3699	33·9452	34.5205	4200
4300	32·9863	33·5753	34·1644	34·7534	35.3425	4300
4400	33·7534	34·3562	34·9589	35·5616	36.1644	4400
4500	34·5205	35·1370	35·7534	36·3699	36.9863	4500
4600	35·2877	35.9178	36·5479	37·1781	37·8082	4600
4700	36·0548	36.6986	37·3425	37·9863	38·6301	4700
4800	36·8219	37.4795	38·1370	38·7945	39·4521	4800
4900	37·5890	38.26.3	38·9315	39·6027	40·2740	4900
5000	38·3562	39.0411	39·7260	40·4110	41·0959	5000

Add \cdot 01 capital for 129–133 days. Add \cdot 02 capital for 202–206 days. For explanation see pp. (29–31).

60, 133, 206, 279, 352 Days

Capital	56 129 202	57 130 203	58 131 204	59 132 205	60 133 206	Capital
	275 348	276 349	277 350	278 351	279 352	
£ 5100 5200 5300 5400 5500	£ 39·1233 39·8904 40·6575 41·4247 42·1918	£ 39.8219 40.6027 41.3836 42.1644 42.9452	£ 40.5205 41.3151 42.1096 42.9041 43.6986	£ 41.2192 42.0274 42.8356 43.6438 44.4521	£ 41.9178 42.7397 43.5616 44.3836 45.2055	5100 5200 5300 5400 5500
5600	42·9589	43.7260	44.4932	45·2603	46.0274	5600
5700	43·7260	44.5068	45.2877	46·0685	46.8493	5700
5800	44·4932	45.2877	46.0822	46·8767	47.6712	5800
5900	45·2603	46.0685	46.8767	47·6849	48.4932	5900
6000	46·0274	46.8493	47.6712	48·4932	49.3151	6000
6100	46·7945	47.6301	48·4658	49·3014	50·1370	6100
6200	47·5616	48.4110	49·2603	50·1096	50·9589	6200
6300	48·3288	49.1918	50·0548	50·9178	51·7808	6300
6400	49·0959	49.9726	50·8493	51·7260	52·6027	6400
6500	49·8630	50.7534	51·6438	52·5324	53·4247	6500
6600	50.6301	51·5342	52·4384	53·3425	54·2466	6600
6700	51.3973	52·3151	53·2329	54·1507	55·0685	6700
6800	52.1644	53·0959	54·0274	54·9589	55·8904	6800
6900	52.9315	53·8767	54·8219	55·7671	56·7123	6900
7000	53.6986	54·6575	55·6164	56·5753	57·5342	7000
7100	54·4658	55·4384	56·4110	57·3836	58·3562	7100
7200	55·2329	56·2192	57·2055	58·1918	59·1781	7200
7300	56·0000	57·0000	58·0000	59·0000	60·0000	7300
7400	56·7671	57·7808	58·7945	59·8082	60·8219	7400
7500	57·5342	58·5616	59·5890	60·6164	61·6438	7500
7600	58·3014	59·3425	60·3836	61·4247	62·4658	7600
7700	59·0685	60·1233	61·1781	62·2329	63·2877	7700
7800	59·8356	60·9041	61·9726	63·0411	64·1096	7800
7900	60·6027	61·6849	62·7671	63·8493	64·9315	7900
8000	61·3699	62·4658	63·5616	64·6575	65·7534	8000
8100	62·1370	63·2466	64·3562	65·4658	66·5753	8100
8200	62·9041	64·0274	65·1507	66·2740	67·3973	8200
8300	63·6712	64·8082	65·9452	67·0822	68·2192	8300
8400	64·4384	65·5890	66·7397	67·8904	69·0411	8400
8500	65·2055	66·3699	67·5342	68·6986	69·8630	8500
8600	65·9726	67·1507	68·3288	69·5068	70.6849	8600
8700	66·7397	67·9315	69·1233	70·3151	71.5068	8700
8800	67·5068	68·7123	69·9178	71·1233	72.3288	8800
8900	68·2740	69·4932	70·7123	71·9315	73.1507	8900
9000	69·0411	70·2740	71·5068	72·7397	73.9726	9000
9100	69·8082	71.0548	72·3014	73·5479	74·7945	9100
9200	70·5753	71.8356	73·0959	74·3562	75·6164	9200
9300	71·3425	72.6164	73·8904	75·1644	76·4384	9300
9400	72·1096	73.3973	74·6849	75·9726	77·2603	9400
9500	72·8767	74.1781	75·4795	76·7808	78·0822	9500
9600	73.6438	74·9589	76·2740	77·5890	78·9041	9600
9700	74.4110	75·7397	77·0685	78·3973	79·7260	9700
9800	75.1781	76·5205	77·8630	79·2055	80·5479	9800
9900	75.9452	77·3014	78·6575	80·0137	81·3699	9900
0,000	76.7123	78·0822	79·4521	80·8219	82·1918	10,000

Add ·03 capital for 275-279 days. Add ·04 capital for 348-352 days.

61, 134, 207, 280, 353 Days

Capital	61 134 207 280 353	62 135 208 281 354	63 136 209 282 355	64 137 210 283 356	65 138 211 284 357	Capital
£ 100 200 300 400 500	£ ·8356 1·6712 2·5068 3·3425 4·1781	£ .8493 1.6986 2.5479 3.3973 4.2466	£ ·8630 I·7260 2·5890 3·452I 4·315I	£ .8767 1.7534 2.6301 3.5068 4.3836	£ .8904 1.7808 2.6712 3.5616 4.4521	£ 100 200 300 400 500
600	5.0137	5.0959	5·1781	5·2603	5·3425	600
700	5.8493	5.9452	6·0411	6·1370	6·2329	700
800	6.6849	6.7945	6·9041	7·0137	7·1233	800
900	7.5205	7.6438	7·7671	7·8904	8·0137	900
1000	8.3562	8.4932	8·6301	8·7671	8·9041	1000
1100	9·1918	9·3425	9·4932	9.6438	9.7945	1100
1200	10·0274	10·1918	10·3562	10.5205	10.6849	1200
1300	10·8630	11·0411	11·2192	11.3973	11.5753	1300
1400	11·6986	11·8904	12·0822	12.2740	12.4658	1400
1500	12·5342	12·7397	12·9452	13.1507	13.3562	1500
1600 1700 1800 1900 2000	13·3699 14·2055 15·0411 15·8767 16·7123	13·5890 14·4384 15·2877 16·1370 16·9863	13.8082 14.6712 15.5342 16.3973 17.2603	14.9041 15.7808 16.6575 17.5342	14·2466 15·1370 16·0274 16·9178 17·8082	1600 1700 1800 1900 2000
2100	17·5479	17.8356	18·1233	18·4110	18.6986	2100
2200	18·3836	18.6849	18·9863	19·2877	19.5890	2200
2300	19·2192	19.5342	19·8493	20·1644	20.4795	2300
2400	20·0548	20.3836	20·7123	21·0411	21.3699	2400
2500	20·8904	21.2329	21·5753	21·9178	22.2603	2500
2600	21.7260	22.0822	22·4384	22·7945	23·1507	2600
2700	22.5616	22.9315	23·3014	23·6712	24·0411	2700
2800	23.3973	23.7808	24·1644	24·5479	24·9315	2800
2900	24.2329	24.6301	25·0274	25·4247	25·8219	2900
3000	25.0685	25.4795	25·8904	26·3014	26·7123	3000
3100	25·9041	26·3288	26·7534	27·1781	27.6027	3100
3200	26·7397	27·1781	27·6164	28·0548	28.4932	3200
3300	27·5753	28·0274	28·4795	28·9315	29.3836	3300
3400	28·4110	28·8767	29·3425	29·8082	30.2740	3400
3500	29·2466	29·7620	30·2055	30·6849	31.1644	3500
3600	30.0822	30·5753	31.0685	31·5616	32·0548	3600
3700	30.9178	31·4247	31.9315	32·4384	32·9452	3700
3800	31.7534	32·2740	32.7945	33·3151	33·8356	3800
3900	32.5890	33·1233	33.6575	34·1918	34·7260	3900
4000	33.4247	33·9726	34.5205	35·0685	35·6164	4000
4100	34·2603	34·8219	35·3836	35.9452	36·5068	4100
4200	35·0959	35·6712	36·2466	36.8219	37·3973	4200
4300	35·9315	36·5205	37·1096	37.6986	38·2877	4300
4400	36·7671	37·3699	37·9726	38.5753	39·1781	4400
4500	37·6027	38·2192	38·8356	39.4521	40·0685	4500
4600	38·4384	39.0685	39.6896	40·3288	40·9589	4600
4700	39·2740	39.9178	40.5616	41·2055	41·8493	4700
4800	40·1096	40.7671	41.4247	42·0822	42·7397	4800
4900	40·9452	41.6164	42.2877	42·9589	43·6301	4900
5000	41·7808	42.4658	43.1507	43·8356	44·5205	5000

Add on capital for 134-138 days. Add on capital for 207-211 days. For explanation see pp. (29-31).

65, 138, 211, 284, 357 Days

Capital	61 134 207 280 353	62 135 208 281 354	63 136 209 282 355	64 137 210 283 356	65 138 211 284 357	Capital
£ 5100 5200 5300 5400 5500	£ 42.6164 43.4521 44.2877 45.1233 45.9589	£ 43.3151 44.1644 45.0137 45.8630 46.7123	£ 44.0137 44.8767 45.7397 46.6027 47.4658	£ 44.7123 45.5890 46.4658 47.3425 48.2192	£ 45.4110 46.3014 47.1918 48.0822 48.9726	£ 5100 5200 5300 5400 5500
5600	46.7945	47.5616	48·3288	49.0959	49.8630	5600
5700	47.6301	48.4110	49·1918	49.9726	56.7534	5700
5800	48.4658	49.2603	50·0548	50.8493	51.6438	5800
5900	49.3014	50.1096	50·9178	51.7260	52.5342	5900
6000	50.1370	50.9589	51·7808	52.6027	53.4247	6000
6100	50·9726	51·8082	52·6438	53:4795	54·3151	6100
6200	51·8082	52·6575	53·5068	54:3562	55·2055	6200
6300	52·6438	53·5068	54·3699	55:2329	56·0959	6300
6400	53·4795	54·3562	55·2329	56:1096	56·9863	6400
6500	54·3151	55·2055	56·0959	56:9863	57·8767	6500
6600	55·1507	56.0548	56.9589	57.8630	58·7671	6600
6700	55·9863	56.9041	57.8219	58.7397	59·6575	6700
6800	56·8219	57.7534	58.6849	59.6164	60·5479	6800
6900	57·6575	58.6027	59.5479	60.4932	61·4384	6900
7000	58·4932	59.4521	60.4110	61.3699	62·3288	7000
7100	59·3288	60·3014	61·2740	62·2466	63·2192	7100
7200	60·1644	61·1507	62·1370	63·1233	64·1096	7200
7300	61·0000	62·0000	63·0000	64·0000	65·0000	7300
7400	61·8356	62·8493	63·8630	64·8767	65·8904	7400
7500	62·6712	63·6986	64·7260	65·7534	66·7808	7500
7600	63·5068	64·5479	65·5890	66.6301	67.6712	7600
7700	64·3425	65·3973	66·4521	67.5068	68.5616	7700
7800	65·1781	66·2466	67·3151	68.3836	69.4521	7800
7900	66·0137	67·0959	68·1781	69.2603	70.3425	7900
8000	66·8493	67·9452	69·0411	70.1370	71.2329	8000
8100	67.6849	68·7945	69·9041	71.0137	72·1233	8100
8200	68.5205	69·6438	70·7671	71.8904	73·0137	8200
8300	69.3562	70·4932	71·6301	72.7671	73·9041	8300
8400	70.1918	71·3425	72·4932	73.6438	74·7945	8400
8500	71.0274	72·1918	73·3562	74.5205	75·6849	8500
8600	71.8630	73·0411	74·2192	75·3973	76·5753	8600
8700	72.6986	73·8904	75·0822	76·2740	77·4658	8700
8800	73.5342	74·7397	75·9452	77·1507	78·3562	8800
8900	74.3699	75·5890	76·8082	78·0274	79·2466	8900
9000	75.2055	76·4384	77·6712	78·9041	80·1370	9000
9100	76·0411	77·2877	78·5342	79·7808	81·0274	9100
9200	76·8767	78·1370	79·3973	80·6575	81·9178	9200
9300	77·7123	78·9863	80·2603	81·5342	82·8082	9300
9400	78·5479	79·8356	81·1233	82·4110	83·6986	9400
9500	79·3836	80·6849	81·9863	83·2877	84·5890	9500
9600	80·2192	81·5342	82·8493	84·1644	85·4795	9600
9700	81·0548	82·3836	83·7123	85·0411	86·3699	9700
9800	81·8904	83·2329	84·5753	85·9178	87·2603	9800
9900	82·7620	84·0822	85·4384	86·7945	88·1507	9900
10,000	83·5616	84·931 5	86·3014	87·6712	89·0411	10,000

Add ·03 capital for 280-284 days. Add ·04 capital for 353-357 days.

66, 139, 212, 285, 358 Days

Capital	66 139 212 285 358	67 140 213 286 359	68 141 214 287 360	69 142 215 288 361	70 143 216 289 362	Capital
£ 100 200 300 400 500	£ •9041 1.8082 2.7123 3.6164 4.5205	£ .9178 1.8356 2.7534 3.6712 4.5890	£ .9315 1.8630 2.7945 3.7260 4.6575	£ •9452 1·8904 2·8356 3·7808 4·7260	£ •9589 1•9178 2•8767 3•8356 4•7945	£ 100 200 300 400 500
600	5:4247	5·5068	5·5890	5.6712	5.7534	600
700	6:3288	6·4247	6·5205	6.6164	6.7123	700
800	7:2329	7·3425	7·4521	7.5616	7.6712	800
900	8:1370	8·2603	8·3836	8.5068	8.6301	900
1000	9:0411	9·1781	9·3151	9.4521	9.5890	1000
1100	9·9452	10·0959	10·2466	10·3973	10·5479	1100
1200	10·8493	11·0137	11·1781	11·3425	11·5068	1200
1300	11·7534	11·9315	12·1096	12·2877	12·4658	1300
1400	12·6575	12·8493	13·0411	13·2329	13·4247	1400
1500	13·5616	13·7671	13·9726	14·1781	14·3836	1500
1600	14·4658	14.6849	14·9041	15·1233	15·3425	1600
1700	15·3699	15.6027	15·8356	16·0685	16·3014	1700
1800	16·2740	16.5205	16·7671	17·0137	17·2603	1800
1900	17·1781	17.4384	17·6986	17 9589	18·2192	1900
2000	18·0822	18.3562	18·6301	18·9041	19·1781	2000
2100	18.9860	19·2740	19·5616	19·8493	20·1370	2100
2200	19.8904	20·1918	20·4932	20·7945	21·0959	2200
2300	20.7945	21·1096	21·4247	21·7397	22·0548	2300
2400	21.6986	22·0274	22·3562	22·6849	23·0137	2400
2500	22.6027	22·9452	23·2877	23·6301	23·9726	2500
2600	23·5068	23.8630	24·2192	24·5753	24.9315	2600
2700	24·4110	24.7808	25·1507	25·5205	25.8904	2700
2800	25·3151	25.6986	26·0822	26·4658	26.8493	2800
2900	26·2192	26.6164	27·0137	27·4110	27.8082	2900
3000	27·1233	27.5342	27·9452	28·3562	28.7671	3000
3100	28.0274	28·452I	28.8767	29·3014	29·7260	3100
3200	28.9315	29·3699	29.8082	30·2466	30·6849	3200
3300	29.8356	30·2877	30.7397	31·1918	31·6438	3300
3400	30.7397	31·2055	31.6712	32·1370	32·6027	3400
3500	31.6438	32·1233	32.6027	33·0822	33·5616	3500
3600 3700 3800 3900 4000	32·5479 33·4521 34·3562 35·2603 36·1644	33.9589 34.8767 35.7945 36.7123	33·5342 34·4658 35·3973 36·3288 37·2603	34·0274 34·9726 35·9178 36·8630 37·8082	34·5205 35·4795 36·4384 37·3973 38·3562	3600 3700 3800 3900 4000
4100	37.0685	37.6301	38·1918	38·7534	39·3151	4100
4200	37.9726	38.5479	39·1233	39·6986	40·2740	4200
4300	38.8767	39.4658	40·0548	40·6438	41·2329	4300
4400	39.7908	40.3836	40·9863	41·5890	42·1918	4400
4500	40.6849	41.3014	41·9178	42·5342	43·1507	4500
4600	41·5890	42·2192	42.8493	43°4795	44·1096	4600
4700	42·4932	43·1370	43.7808	44°4247	45·0685	4700
4800	43·3973	44·0548	44.7123	45°3699	46·0274	4800
4900	44·3014	44·9726	45.6438	46°3151	46·9863	4900
5000	45·2055	45·8904	46.5753	47°2603	47·9452	5000

Add or capital for 139-143 days. Add or capital for 212-216 days. For explanation see pp. (29-31).

70, 143, 216, 289, 362 Days

Capital	66 139 212 285 358	67 140 213 286 359	68 141 214 287 360	69 142 215 288 361	70 143 216 289 362	Capital
£ 5100 5200 5300 5400 5500	£ 46·1096 47·0137 47·9178 48·8219 49·7260	£ 46.8082 47.7260 48.6438 49.5616 50.4795	£ 47.5068 48.4384 49.3699 50.3014 51.2329	£ 48.2055 49.1507 50.0959 51.0411 51.9863	£ 48.9041 49.8630 50.8219 51.7808 52.7397	£ 5100 5200 5300 5400 5500
5600	50.6301	51·3973	52·1644	52·9315	53.6986	5600
5700	51.5342	52·3151	53·0959	53·8767	54.6575	5700
5800	52.4384	53·2329	54·0274	54·8219	55.6164	5800
5900	53.3425	54·1507	54·9589	55·7671	56.5753	5900
6000	54.2466	55·0685	55·8904	56·7123	57.5342	6000
6100	55·1507	55.9863	56·8219	57.6575	58·4932	6100
6200	56·0548	56.9041	57·7534	58.6027	59·4521	6200
6300	56·9589	57.8219	58·6849	59.5479	60·4110	6300
6400	57·8630	58.7397	59·6164	60.4932	61·3699	6400
6500	58·7671	59.6575	60·5479	61.4384	62·3288	6500
6600	59.6712	60·5753	61·4795	62·3836	63·2877	6600
6700	60.5753	61·4932	62·4110	63·3288	64·2466	6700
6800	61.4795	62·4110	63·3425	64·2740	65·2055	6800
6900	62.3836	63·3288	64·2740	65·2192	66·1644	6900
7000	63.2877	64·2466	65·2055	66·1644	67·1233	7000
7100	64·1918	65·1644	66·1370	67·1096	68.0822	7100
7200	65·0959	66·0822	67·0685	68·0548	69.0411	7200
7300	66·0000	67·0000	68·0000	69·0c00	70.0000	7300
7400	66·9041	67·9178	68·9315	69·9452	70.9589	7400
7500	67·8082	68·8356	69 8630	70·8904	71.9178	7500
7600	68·7123	69.7534	70·7945	71.8356	72.8767	7600
7700	69·6164	70.6712	71·7260	72.7808	73.8356	7700
7800	70·5205	71.5890	72·6575	73.7260	74.7945	7800
7900	71·4247	72.5068	73·5890	74.6712	75.7534	7900
8000	72·3288	73.4247	74· 5 205	75.6164	76.7123	8000
8100	73·2329	74·3425	75·452I	76·5616	77.6712	8100
8200	74·1370	75·2603	76·3836	77·5068	78.6301	8200
8300	75·0411	76·1781	77·3151	78·4521	79.5890	8300
8400	75·9452	77·0959	78·2466	79·3973	80.5479	8400
8500	76·8493	78·0137	79·1781	80·3425	81.5068	8500
8600	77.7534	78·9315	80·1096	81·2877	82·4658	8600
8700	78.6575	79·8493	81·0411	82·2329	83·4247	8700
8800	79.5616	80·7671	81·9726	83·1781	84·3836	8800
8900	80.4658	81·6849	82·9041	84·1233	85·3425	8900
9000	81.3699	82·6027	83·8356	85·0685	86·3014	9000
9100	82·2740	83·520 5	84.7671	86·0137	87·2603	910 0
9200	83·1781	84·4384	85.6986	86·9589	88·2192	920 0
9300	84·0822	85·3562	86.6301	87·9041	89·1781	93 0 0
9400	84·9863	86 2740	87.5616	88·8493	90·1370	9400
9500	85·8904	87·1918	88.4932	89·7945	91·0959	9500
9600	86·7945	88·1096	89·4247	90.7397	92·0548	9600
9700	8 7·6986	89·0274	90·3562	91.6849	93·0137	9700
9800	88·6027	89·9452	91·2877	92.6301	93·9726	9800
9900	89·5068	90·8630	92·2192	93.5753	94·9315	9900
10,000	90•4110	91·7808	(3·1507	94.5205	95·8904	10,000

Add ·03 capital for 285-289 days. Add ·04 capital for 358-362 days.

71, 144, 217, 290, 363 Days

Capital	71 144 217 290 363	72 145 218 291 364	73 146 219 292 365	146 219 292 365	219 292 365	292 365	Capital
£ 100 200 300 400 500	£ •9726 1·9452 2·9178 3·8904 4·8630	£ •9863 1•9726 2•9589 3•9452 4•9315	£ 1 2 3 4 5	£ 2 4 6 8 10	£ 3 6 9 12 15	£ 4 8 12 16 20	£ 100 200 300 400 500
600 700 800 900 1000	5.8356 6.8082 7.7808 8.7534 9.7260	5.9178 6.9041 7.8904 8.8767 9.8630	6 7 8 9	12 14 16 18 20	18 21 24 27 30	24 28 32 36 40	600 700 800 900 1000
1100 1200 1300 1400 1500	10.6986 11.6712 12.6438 13.6164 14.5890	10.8493 11.8356 12.8219 13.8082 14.7945	11 12 13 14 15	22 24 26 28 30	33 36 39 42 45	44 48 52 56 60	1100 1200 1300 1400 1500
1600 1700 1800 1900 2000	15.5616 16.5342 17.5068 18.4795 19.4521	15.7808 16.7671 17.7534 18.7397 19.7260	16 17 18 19 20	32 34 36 38 40	48 51 54 57 60	64 68 72 76 80 84	1700 1800 1900 2000 2100
2100 2200 2300 2400 2500	20·4247 21·3973 22·3699 23·3425 24·3151	20·7123 21·6986 22·6849 23·6712 24·6575	21 22 23 24 25	42 44 46 48 50	63 66 69 72 75	88 92 96 100	2200 2300 2400 2500 2600
2600 2700 2800 2900 3000	25·2877 26·2603 27·2329 28·2055 29·1781	25.6438 26.6301 27.6164 28.6027 29.5890	26 27 28 29 30	52 54 56 58 60	78 81 84 87 90	104 108 112 116 120	2700 2800 2900 3000 3100
3100 3200 3300 3400 3500	30·1507 31·1233 32·0959 33·0685 34·0411	30·5753 31·5616 32·5479 33·5342 34·5205	31 32 33 34 35	62 64 66 68 70	93 96 99 102 105	124 128 132 136 140	3200 3300 3400 3500 3600
3600 3700 3800 3900 4000	35.0137 35.9863 36.9589 37.9315 38.9041	35·5068 36·4932 37·4795 38·4658 39·4521	36 37 38 39 40	72 74 76 78 80	108 111 114 117 120	144 148 152 156 160	3700 3800 3900 4000 4100
4100 4200 4300 4400 4500	39·8767 40·8493 41·8219 42·7945 43·7671	40.4384 41.4247 42.4110 43.3973 44.3836	41 42 43 44 45	82 84 86 88 90	123 126 129 132 135	164 168 172 176 180	4200 4300 4400 4500
4600 4700 4800 4900 5000	44.7397 45.7123 46.6849 47.6575 48.6301	45·3699 46·3562 47·3425 48·3288 49·3151	46 47 48 49 50	92 94 96 98 100	138 141 144 147 150	184 188 192 196 200	4600 4700 4800 4900 5000

Add or capital for 144-365 days. Add o2 capital for 217-365 days.

For explanation see pp. (29-31).

73, 146, 219, 292, 365 Days

Capital.	71 144 217 290 363	72 145 218 291 364	73 146 219 292 365	146 219 292 365	219 292 365	292 365	Capital.
5100 5200 5300 5400 5500	£ 49.6027 50.5753 51.5479 52.5205 53.4932	£ 50·3014 51·2877 52·2740 53·2603 54·2466	£ 51 52 53 54 55	£ 102 104 106 108	£ 153 156 159 162 165	£ 204 208 212 216 220	£ 5100 5200 5300 5400 5500
5600	54·4658	55·2329	56	112	168	224	5600
5700	55·4384	56·2192	57	114	171	228	5700
5800	56·4110	57·2055	58	116	174	232	5800
5900	57·3836	58·1918	59	118	177	236	5900
6000	58·3562	59·1781	60	120	180	240	6000
6100	59·3288	60·1644	61	122	183	244	6100
6200	60·3014	61·1507	62	124	186	248	6200
6300	61·2740	62·1370	63	126	189	252	6300
6400	62·2466	63·1233	64	128	192	256	6400
6500	63·2192	64·1096	65	130	195	260	6500
6600	64·1918	65.0959	66	132	198	264	6600
6700	65·1644	66.0822	67	134	201	268	6700
6800	66·1370	67.0685	68	136	204	272	6800
6900	67·1096	68.0548	69	138	207	276	6900
7000	69·0822	69.0411	70	140	210	280	7000
7100	69.0548	70·0274	71	142	213	284	7100
7200	70.0274	71·0137	72	144	216	288	7200
7300	71.0000	72·0000	73	146	219	292	7300
7400	71.9726	72·9863	74	148	222	296	7400
7500	72.9452	73·9726	75	150	225	300	7500
7600	73.9178	74·9589	76	152	228	304	7600
7700	74.8904	75·9452	77	154	231	308	7700
7800	75.8630	76·9315	78	156	234	312	7800
7900	76.8356	77·9178	79	158	237	316	7900
8000	77.8082	78·9041	80	160	240	320	8000
8100	78·7808	79·8904	81	162	243	324	8100
8200	79·7534	80·8767	82	164	246	328	8200
8300	80·7260	81·8630	83	166	249	332	8300
8400	81·6986	82·8493	84	168	252	336	8400
8500	82·6712	83·8356	85	170	255	340	8500
8600	83.6438	84.8219	86	172	258	344	8600
8700	84.6164	85.8082	87	174	261	348	8700
8800	85.5890	86.7945	88	176	264	352	8800
8900	86.5616	87.7808	89	178	267	356	8900
9000	87.5342	88.7671	90	180	270	360	9000
9100	88·5068	89.7534	91	182	273	364	9100
9200	89·4795	90.7397	92	184	276	368	9200
9300	90·4521	91.7260	93	186	279	372	9300
9400	91·4247	92.7123	94	188	282	376	9400
9500	92·3973	93.6986	95	190	285	380	9500
9600 9700 9800 9900 10,000	93·3699 94·3425 95·3151 96·2877 97·2603	94.6849 95.6712 96.6575 97.6438 98.6301	96 97 98 99	192 194 196 198 200	288 291 294 297 300	384 388 392 396 400	9600 9700 9800 9900 10,000

Add ·03 capital for 290-365 days. Add ·04 capital for 363-365 days.

INTEREST TABLES

INTERES	T, AMOUNT, A	ND DISCOUNT (EAR, NINE,
Interest per Annum	Period	Interest	Amount	Discount
1 °/。	1 year	*010000	I · 01 0000	•009901
	9 months	*007500	I · 007 500	•007444
	6 ,,	*005000	I · 00 5000	•004975
	3 ,,	*002500	I · 002 500	•002494
1 ₄ °/ _°	1 year	·012500	1.012500	*012346
	9 months	·009375	1.009375	*009288
	6 ,,	·006250	1.006250	*006211
	3 ,,	·003125	1.003125	*003115
1½ °/。	1 year	*015000	1.015000	*014778
	9 months	*011250	1.011250	*011125
	6 ,,	*007500	1.007500	*007444
	3 ,,	*003750	1.003750	*003736
$1_{rac{3}{4}}$ °/ $_{\circ}$	$\begin{cases} 1 \text{ year} \\ 9 \text{ months} \\ 6 \\ 3 \end{cases}$	•017500 •013125 •008750 •004375	1.017500 1.013125 1.008750 1.004375	*017199 *012955 *008674 *004356
2 %	1 year	*020000	I · 020000	•019608
	9 months	*015000	I · 015000	•014778
	6 ,,	*010000	I · 010000	•009901
	3 ,,	*005000	I · 005000	•004975
$2rac{1}{4}~^{\circ}/_{\circ}$	$\begin{cases} 1 \text{ year} \\ 9 \text{ months} \\ 6 \\ 3 \end{cases},$	•022500 •016875 •011250 •005625	1.022500 1.016875 1.011250 1.005625	•022005 •016595 •011125 •005593
$2rac{1}{2}{}^\circ/_{\circ}$	$ \begin{cases} 1 \text{ year} \\ 9 \text{ months} \\ 6 \\ 3 \end{cases} $	•025000 •018750 •012500 •006250	1.025000 1.018750 1.012500 1.006250	*024390 *018405 *012346 *006211
$2rac{3}{4}~^{\circ}/_{\circ}$	$ \begin{cases} 1 \text{ year} \\ 9 \text{ months} \\ 6 \\ 3 \\ , \end{cases} $	•027500 •020625 •013750 •006875	1.027500 1.020625 1.013750 1.006875	•026764 •020208 •013563 •006828
3 °/。	$\begin{cases} 1 \text{ year} \\ 9 \text{ months} \\ 6 \\ 3 \end{cases}$	*030000 *022500 *015000 *007500	I ·030000 I ·022500 I ·015000 I ·007500	•029126 •022005 •014778 •007444
$3\frac{1}{4}~^{\circ}/_{\circ}$	1 year	·032500	1.032500	·031477
	9 months	·024375	1.024375	·023795
	6 ,,	·016250	1.016250	·015990
	3 ,,	·008125	1.008125	·080595
$oxed{3_{rac{1}{2}}^{\circ}/_{\circ}}$	1 year	•035000	1.035000	•033816
	9 months	•026250	1.026250	•02557 9
	6 ,,	•017500	1.017500	•017199
	3 ,,	•008750	1.008750	•0086 7 4
$3\frac{3}{4}^{\circ}/_{\circ}$	1 year	.037500	1.037500	•036145
	9 months	.028125	1.028125	•027356
	6 ,,	.018750	1.018750	•018405
	3 ,,	.009375	1.009375	•092879

For explanation see pp. (31, 32). (250)

INTEREST,		ND DISCOUNT (OF £1 IN A YE IONTHS	AR, NINE,
Interest per Annum	Period	Interest	Amount	Discount
	1 year	•040000	1.040000	.038462
4 0/	9 months	.030000	1.030000	·029126
4 °/	6 ,,	*020000	I .020000	•019608
, ,	(3 ,,	•010000	1.010000	•009901
	1 year	•042500	1.042500	.040767
11 0/	9 months	·031875	1.031875	.030890
41 %	6 ,,	·021250	1.021250	·020808
	(3 ,,	•010625	1.010625	.010213
	1 year	*045000	1.045000	•043062
4 + 0 /	9 months	•033750	1.033750	•032648
$4\frac{1}{2}$ °/.	6 ,,	*022500	1.022500	*022005
4 /0	3 ",	.011250	1.011250	.011125
	(1 year	•047500	1.047500	•045346
40 01	9 months	.035625	1.035625	*034400
43 %	6 ,,	.023750	1.023750	.023199
± /0	(3 ,,	•011875	1.011875	•011736
	(1 year	•050000	1.050000	•047619
- 0/	9 months	·037500	1.037500	.036145
5 °/。	6 ,,	•025000	1.025000	.024390
, 0	(3 ,,	.012500	1.012500	•012346
	(1 year	.055000	1.055000	.052133
F101	9 months	·041250	1.041250	.039616
$5\frac{1}{2}$ °/.	6 ,,	·027500	1.027500	·026764
2 70	(3 ,,	.013750	1.013750	.013564
	(1 year	•060000	1.060000	•056604
6 0/	9 months	•045000	1.045000	.043062
6 %	6 ,,	•030000	1.030000	.029126
,	(3 ,,	·015000	1.015000	.014778
	(1 year	•065000	1.065000	•061033
61 0/	9 months	•048750	1.048750	•046484
$6\frac{1}{2}$ °/.) 6 ,,	.032500	1.032500	.031477
	(3 ,,	·016250	1.016250	·015990
	(1 year	•070000	1.070000	·06 5 42 I
7 0/	9 months	.052500	1.052500	•049881
1 / 0	16 ,,	.035000	1.035000	•033816
	(3 ,,	.017500	1.017500	.017199
	1 year	•080000	1.080000	•074074
8 °/	9 months	•060000	1.060000	•056604
O / ₀	6 ,,	•040000	1.040000	•038462
	(3 ,,	*020000	1.020000	.019 6 08
	(1 year	•090000	1.090000	.082569
9 %	9 months	.067500	1.067500	•063232
9 /。	76 ,,	•045000	1.045000	•043062
	(3 ,,	*022500	1.022500	.022005
	(1 year	·10000Q	1.100000	•090909
0 %	9 months	.075000	1.075000	069767
.0 %	6 ,,	•050000	1.050000	•047619
1	(3 ,,	.025000	1.025000	.024390

THE DECIMAL CORRESPONDING TO EVERY FARTHING IN THE £

Pence	08.	18.	28.	3 8.	4 8.	Pence
0 0 ¹ / ₄ 0 ¹ / ₂ 0 ³ / ₄	'00000 '00104 '00208 '00313	°05000 °05104 °05208 °05313	10000 10104 10208 10313	15000 15104 15208 15313	·20000 ·20104 ·20208 ·20313	0 0 1 0 1 0 2 0 3 4
I I ¹ / ₄ I ¹ / ₂ I ³ / ₄	·00417 ·00521 ·00625 ·00729	°05417 °05521 °05625 °05729	·10417 ·10521 ·10625 ·10729	·15417 ·15521 ·15625 ·15729	°20417 °20521 °20625 °20729	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2 2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄	·00833 ·00938 ·01042 ·01146	°05833 °05938 °06042 °06146	·10833 ·10938 ·11042 ·11146	·15833 ·15938 ·16042 ·16146	·20833 ·20938 ·21042 ·21146	2 2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄
3 3 ¹ / ₄ 3 ¹ / ₂ 3 ⁸ / ₄	·01250 ·01354 ·01458 ·01563	•06250 •06354 •06458 •06563	·11250 ·11354 ·11458 ·11563	·16250 ·16354 ·16458 ·16563	·21250 ·21354 ·21458 ·21563	3 3 ¹ / ₄ 3 ¹ / ₂ 3 ⁸ / ₄
4 4 4 4 2 4 3	·01667 ·01771 ·01875 ·01979	•06667 •06771 •06875 •06979	·11667 ·11771 ·11875 ·11979	·16667 ·16771 ·16875 ·16979	·21667 ·21771 ·21875 ·21979	4 4 ¹ / ₄ 4 ¹ / ₂ 4 ³ / ₄
5 5 1 2 5 3 4 5	·02083 ·02188 ·02292 ·02396	•07083 •07188 •07292 •07396	·12083 ·12188 ·12292 ·12396	·17083 ·17188 ·17292 ·17396	·22083 ·22188 ·22292 ·22396	5 5 ¹ / ₁ 5 ² / ₃ 5 ³ / ₄
6 6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄	°02500 °02604 °02708 °02813	•07500 •07604 •07708 •07813	·12500 ·12604 ·12708 ·12813	·17500 ·17604 ·17708 ·17813	*22500 *22604 *22708 *22813	6 6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄
7 74 72 73 74	·02917 ·03021 ·03125 ·03229	•07917 •08021 •08125 •08229	·12917 ·13021 ·13125 ·13229	17917 18021 18125 18229	·22917 ·23021 ·23125 ·23229	7 7 7 1 2 2 3 4
8 8 1 8 2 8 3 4	°03333 °03438 °03542 °03646	•08333 •08438 •08542 •08646	°13333 °13438 °13542 °13646	•18333 •18438 •18542 •18646	·23333 ·23438 ·23542 ·23646	8 8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄
9 9 1 9 1 2 9 3 4	*03750 *03854 *03958 *04063	*08750 *08854 *08958 *09063	13750 13854 13958 14063	·18750 ·18854 ·18958 ·19063	*23750 *23854 *23958 *24063	9 9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄
10 10 ¹ / ₄ 10 ¹ / ₂ 10 ³ / ₄	•04167 •04271 •04375 •04479	*09167 *09271 *09375 *09479	14167 14271 14375 14479	19167 19271 19375 19479	*24167 *24271 *24375 *24479	$ \begin{array}{c c} $
11 $11\frac{1}{4}$ $11\frac{1}{2}$ $11\frac{3}{4}$	*04583 *04688 *04792 *04896	*09583 *09688 *09792 *09896	14583 14688 14792 14896	19583 19688 19792 19896	*24583 *24688 *24792 *24896	11 11 ¹ / ₄ 11 ¹ / ₂ 11 ³ / ₄

For explanation see pp. (32, 33).

DECIMALS OF £1

THE	DECIMAL.	CORRESPONDING	TO	EVERV	FARTHING	TN	THE	2

		1	f f					
Pence	5 8.	6 s.	7 s.	8 s.	98.	Pence		
0 0 ¹ / ₄ 0 ¹ / ₂ 0 ³ / ₄	*25000 *25104 *25208 *25313	*30000 *30104 *30208 *30313	'35000 '35104 '35208 '35313	'40000 '40104 '40208 '40313	*45000 *45104 *45208 *45313	0 0 1 1 2 3 3 4		
1 14 1:33 14	*25417 *25521 *25625 *25729	'30417 '30521 '30625 '30729	'35417 '35521 '35625 '35729	*40417 *40521 *40625 *40729	'45417 '45521 '45625 '45729	I I 1 1 1 2 2 2 3 4 1 3 4		
2 2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄	·25833 ·25938 ·26042 ·26146	·30833 ·30938 ·31042 ·31146	°35833 °35938 °36042 °36146	°40833 °40938 °41042 °41146	'45833 '45938 '46042 '46146	2 2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄		
3 3 1 3 2 3 3	°26250 °26354 °26458 °26563	'31250 '31354 '31458 '31563	°36250 '36354 '36458 '36563	'41250 '41354 '41458 '41563	'46250 '46354 '46458 '46563	3 3 ¹ / ₄ 3 ¹ / ₂ 3 ³ / ₄		
4 4 4 4 2 4 3	·26667 ·26771 ·26875 ·26979	·31667 ·31771 ·31875 ·31979	36667 36771 36875 36979	·41667 ·41771 ·41875 ·41979	·46667 ·46771 ·46875 ·46979	4 4 4 4 1 2 3 4 4		
5 5 ¹ / ₂ 5 ³ / ₄	°27083 °27188 °27292 °27396	·32083 ·32188 ·32292 ·32396	*37083 *37188 *37292 *37396	·42083 ·42188 ·42292 ·42396	'47083 '47188 '47292 '47396	5 5 5 5 5 3		
6 64 62 63 64	°27500 °27604 °27708 °27813	'32500 '32604 '32708 '32813	*37500 *37604 *37708 *37813	°42500 °42604 °42708 °42813	'47500 '47604 '47708 '47813	6 6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄		
7 74 74 74 74	·27917 ·28021 ·28125 ·28229	·32917 ·33021 ·33125 ·33229	·37917 ·38021 ·38125 ·38229	'42917 '43021 '43125 '43229	.47917 .48021 .48125 .48229	7 7 ¹ / ₄ 7 ¹ / ₂ 7 ⁸ / ₄		
8 8 1 8 1 2 3 3 4	·28333 ·28438 ·28542 ·28646	'33333 '33438 '33542 '33646	*38333 *38438 *38542 *38646	'43333 '43438 '43542 '43646	'48333 '48438 '48542 '48646	8 8 14 8 28 4		
9 9 ¹ / ₄ 9 ¹ / ₂₃ 9 ⁴ / ₄	·28750 ·28854 ·28958 ·29063	33750 33854 33958 34063	·38750 ·38854 ·38958 ·39063	*43750 *43854 *43958 *44063	°48750 °48854 °48958 °49063	9 9 ¹ / ₂ 9 ¹ / ₂ 9 ³ / ₄		
10 10 10 10 2 10 3 10	·29167 ·29271 ·29375 ·29479	·34167 ·34271 ·34375 ·34479	39167 39271 39375 39479	'44167 '44271 '44375 '44479	'49167 '49271 '49375 '49479	10 10 ¹ / ₄ 10 ¹ / ₂ 10 ³ / ₄		
II II	°29583 °29688 °29792 °29896	*34583 *34688 *34792 *34896	*39583 *39688 *39792 *39896	°44583 °44688 °44792 °44896	°49583 °49688 °49792 °49896	11 11 ¹ / ₄ 11 ¹ / ₂ 11 ³ / ₄		

THE DECIMAL CORRESPONDING TO EVERY FARTHING IN THE £

Pence	10 8.	118.	12 8.	138.	14.8.	Pence
0 0 4 0 1 0 2 0 3	*50000 *50104 *50208 *50313	*55000 *55104 *55208 *55313	*60000 *60104 *60208 *60313	•65000 •65104 •65208 •65313	'70000 '70104 '70208 '70313	0 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1
I I 1 1 1 2 1 3 3 4	·50417 ·50521 ·50625 ·50729	*55417 *55521 *55625 *55729	·60417 ·60521 ·60625 ·60729	·65417 ·65521 ·65625 ·65729	.70417 .70521 .70625 .70729	I I 1 1 1 1 2 2 3 3 4
2 2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄	*50833 *50938 *51042 *51146	·55833 ·55938 ·56042 ·56146	·60833 ·60938 ·61042 ·61146	•65833 •65938 •66042 •66146	.70833 .70938 .71042 .71146	2 2 ¹ / ₄ 2 ¹ / ₂ 2 ³ / ₄
3 3 1 3 1 2 3 3 3 4	·51250 ·51354 ·51458 ·51563	•56250 •56354 •56458 •56563	·61250 ·61354 ·61458 ·61563	·66250 ·66354 ·66458 ·66563	71250 71354 71458 71563	3 3 4 3 3 3 3 4
4 4 4 4 1 2 4 3 4	·51667 ·51771 ·51875 ·51979	·56667 ·56771 ·56875 ·56979	•61667 •61771 •61875 •61979	•66667 •66771 •66875 •66979	.71667 .71771 .71875 .71979	4 4 4 1 4 1 2 4 3 4
5 5 5 5 5 2 5 3	·52083 ·52188 ·52292 ·52396	·57083 ·57188 ·57292 ·57396	•62083 •62188 •62292 •62396	•67083 •67188 •67292 •67396	72083 72188 72292 72396	5 5 5 5 5 8 4
6 6 6 6 6 8 6 8	·52500 ·52604 ·52708 ·52813	·57500 ·57604 ·57708 ·57813	*62500 *62604 *62708 *62813	·67500 ·67604 ·67708 ·67813	72500 72604 72708 72813	6 6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄
7 7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄	·52917 ·53021 ·53125 ·53229	·57917 ·58021 ·58125 ·58229	·62917 ·63021 ·63125 ·63229	·67917 ·68021 ·68125 ·68229	.72917 .73021 .73125 .73229	7 7 7 7 7 7 2 3
8 8 14 8 12 8 8 4	`53333 `53438 `53542 `53646	58333 58438 58542 58646	·63333 ·63438 ·63542 ·63646	•68333 •68438 •68542 •68646	73333 73438 73542 73646	8 8 1 8 1 8 1 8 2 3 4
9 9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄	53750 53854 53958 54063	·58750 ·58854 ·58958 ·59063	·63750 ·63854 ·63958 ·64063	*68750 *68854 *68958 *69063	73750 73854 73958 74063	9 9 1 9 1 9 2 3 4
10 10 ¹ / ₄ 10 ¹ / ₂ 10 ³ / ₄	°54167 °54271 °54375 °54479	*59167 *59271 *59375 *59479	*64167 *64271 *64375 *64479	*69167 *69271 *69375 *69479	74167 74271 74375 74479	10 10 ¹ / ₄ 10 ¹ / ₂ 10 ³ / ₄
$\begin{array}{c} \mathbf{II} \\ \mathbf{II} \\ \mathbf{II} \\ \mathbf{II} \\ 2 \\ \mathbf{II} \\ 3 \\ 4 \end{array}$	·54583 ·54688 ·54792 ·54896	*59583 *59688 *59792 *59896	•64583 •64688 •64792 •64896	*69583 *69688 *69792 *69896	*745 ⁸ 3 *74688 *74792 *74 ⁸ 96	II II

For explanation see pp. (32, 33).

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	.75104	·80104	·85104	*90104	*95104	0 ¹ / ₄
	.75208	·80208	·85208	*90208	*95208	0 ¹ / ₂
	.75313	·80313	·85313	*90313	*95313	0 ³ / ₄
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I ³ / ₄	°75729	·80729	·85729	*90729	'95729	
2	.75833	·80833	·85833	·90833	*95833	2
2 ¹ / ₄	.75938	·80938	·85938	·90938	*95938	2 ¹ / ₄
2 ¹ / ₂	.76042	·81042	·86042	·91042	*96042	2 ¹ / ₂
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3 3 ¹ / ₂ 3 ³ / ₄	76250 76354 76458 76563	·81250 ·81354 ·81458 ·81563	·86250 ·86354 ·86458 ·86563	91250 91354 91458 91563	•96250 •96354 •96458 •96563	3 3 4 3 2 3 3
4	·76667	·81667	·86667	·91667	96667	4
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4 ¹ / ₂	·76875	·81875	·86875	·91875	96875	4 ¹ / ₂
4 ³ / ₄	·76979	·81979	·86979	·91979	96979	4 ³ / ₄

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INTEREST TABLES

The Number of	Years in which	an Amount is	doubled by	Accumulation at
	SIMPLE ANI			

Rate per Cent.	At Simple Interest	At Compound Interest	Rate per Cent.
I	100.00	69.66	I
11/4	80.00	55.80	I 1/4
$\mathbf{I}_{\overline{2}}^{\widehat{1}}$	66.67	46.56	I ½ 1 3 4
1½ 1¾	57.14	39.95	13/4
2	50.00	35.00	2
21/4	44*44	31.12	21/4
$2\frac{1}{2}$	40.00	28.07	2½ 2¾
2\frac{1}{2} 2\frac{1}{2} 2\frac{3}{4}	36.36	25.22	234
3	33.33	23.45	3
$3\frac{1}{4}$	30.77	21.67	31/4
$3\frac{1}{2}$	28.57	20.12	$\frac{3\frac{1}{2}}{3\frac{3}{4}}$
$3\frac{1}{4}$ $3\frac{1}{2}$ $3\frac{3}{4}$	26.67	18.83	34
4	25.00	17.67	4
4½ 5 6	22.22	15.75	4½ 5 6
5	20.00	14.51	5
6	16.67	11.90	6
7	14:29	10.24	7
7 8	12.50	9.01	8
9	11.11	8.04	9
10	10.00	7.27	10

DECIMALS OF ONE YEAR

I					Decimal of One Year
	·019231	27	*519231	I	.083333
2	·038462	28	.538462	2	166667
3 4	.057692	29	.557692	3	'250000
4	.076923	30	.576923	4	*333333
5 6	.096154	31	.596154	5	·416667
6	•115385	32	·615385		*500000
7 8	·134615	33	.634615	7	.283333
8	·153846	34	653846	8	•666667
9	173077	35	.673077	9	·750000
10	192308	35 36	.692308	IÓ	.833333
II	.211538		.711538	II	916667
12	•230769	37 38	.730769	12	1.000000
13	*250000	39	.750000	D	Decimals of One Year
14	•269231	40	.769231	Days	Decimals of One 1 ear
15	.288462	41	·788462	30	.082192
16	.307692	42	.807692	60	•164384
17	*326923	43	826923	90	.246575
18	*346154	44	.846154	120	.328767
19	.365385	45	.865385	150	.410959
20	•384615	46	.884615	180	'493151
21	.403846	47	1903846	210	575342
22	423077	48	923077	240	.657534
23	•442308	1	.942308	270	.739726
24	461538	49 50	961538	300	.821918
	.480769	51	980709	330	904110
25 26	1500000	52	1.000000	365	1.000000

For explanation see pp. (33, 34). (256)

SHOWING THE

EXPECTATION OF LIFE

AND THE

NUMBERS SURVIVING EACH YEAR

ACCORDING TO VARIOUS MORTALITY TABLES

	THE EX	PECTATIO	N, OR AVE	RAGE DU	RATION,	OF LIFE	
Com- pleted Age	North- ampton Experience	Carlisle Experience	English Experience No. 3 (Males)	Actuaries' HM. (Healthy Males) Experience	British Life Offices Om.	English Experience No. 8 (Males)	Com- pleted Age
	1780	1815	1864	1869	1893	1914	
0 5	Yeurs 25·18 40•84	Years 38.72 51.25	Years 39.91 49.71	Years	Years	Years 51.50 57.14	0 5
10	39·78	48·82	47.05	50·291	51.959	53.08	10
11	39·14	48·04	46.31	49·536	51.134	52.18	11
12	38·49	47·27	45.54	48·733	50.306	51.27	12
13	37·83	46·51	44.76	47·893	49.480	50.37	13
14	37·17	45·75	43.97	47·032	48.652	49.46	14
15	36·51	45.00	43·18	46·161	47·823	48·57	15
16	35·85	44.27	42·40	45·292	46·993	47·68	16
17	35·20	43.57	41·64	44·438	46·165	46·80	17
18	34·58	42.87	40·90	43·609	45·336	45·93	18
19	33·99	42.17	40·17	42·817	44·509	45·07	19
20	33.43	41·46	39·48	42.061	43.682	44·21	20
21	32.90	40·75	38·80	41.326	42.857	43·37	21
22	32.39	40·04	38·13	40.603	42.035	42·53	22
23	31.88	39·31	37·46	39.879	41.215	41·68	23
24	31.36	38·59	36·79	39.147	40.396	40·84	24
25	30·85	37·86	36·12	38·405	39·583	40.00	25
26	30·33	37·14	35·44	37·658	38·771	39.16	26
27	29·82	36·41	34·77	36·908	37·964	38.32	27
28	29·30	35·69	34·10	36·162	37·161	37.48	28
29	28·79	35·00	33·43	35·419	36·361	36.65	29
30	28·27	34·34	32·76	34.681	35·567	35.81	30
31	27·76	33·68	32·09	33.946	34·777	34.98	31
32	27·24	33·03	31·42	33.213	33·990	34.16	32
33	26·72	32·36	30·74	32.481	33·209	33.33	33
34	26·20	31·68	30·07	31.748	32·432	32.52	34
35	25.68	31·00	29·40	31·016	31.659	31.71	35
36	25.16	30·32	28·73	30·286	30.891	30.90	36
37	24.64	29·64	28·06	29·560	30.126	30.11	37
38	24.12	28·96	27·39	28·838	29.367	29.31	38
39	23.60	28·28	26·72	28·118	28.611	28.53	39
40	23·08	27.61	26·06	27·399	27·860	27·74	40
41	22·56	26.97	25·39	26·679	27·112	26·97	41
42	22·04	26.34	24·73	25·956	26·370	26·20	42
43	21·54	25.71	24·07	25·233	25·631	25·43	43
44	21·03	25.09	23·41	24·511	24·897	24·67	44
45	20·52	24·46	22.76	23.792	24·168	23·92	45
46	20·02	23·82	22.11	23.079	23·445	23·18	46
47	19·51	23·17	21.46	22.375	22·726	22·45	47
48	19·00	22·50	20.82	21.679	22·013	21·72	48
49	18·49	21·81	20.17	20.989	21·307	21·00	49

For explanation see pp. (35-37).

	THE EX	PECTATIO	N, OR AVE	ERAGE DU	RATION,	OF LIFE	
Completed Age	North- ampton Experience	Carlisle Experience	English Experience No. 3 (Males)	Actuaries' HM. (Healthy Males) Experience	British Life Offices Om.	English Experience No. 8 (Males)	Com- pleted Age
	1780	1815	1864	1869	1893	1914	
50 51 52 53 54	Years 17.99 17.50 17.02 16.54 16.06	Years 21·11 20·39 19·68 18·97 18·28	Years 19·54 18·90 18·28 17·67 17·06	Years 20·306 19·627 18·951 18·281 17·618	Years 20.607 19.914 19.229 18.551 17.882	Years 20·29 19·59 18·90 18·22 17·55	50 51 52 53 54
55 56 57 58 59	15·58 15·10 14·63 14·15 13·68	17·58 16·89 16·21 15·55 14·92	16·45 15·86 15·26 14·68 14·10	16·962 16·316 15·679 15·052	17·222 16·571 15·930 15·299 14·679	16·89 16·24 15·61 14·98 14·37	55 56 57 58 59
60 61 62 63 64	13·21 12·75 12·28 11·81 11·35	14·34 13·82 13·31 12·81 12·30	13·53 12·96 12·41 11·87 11·34	13.830 13.237 12.659 12.095 11.547	14·071 13·474 12·890 12·319 11·761	13.78 13.19 12.62 12.07 11.52	60 61 62 63 64
65 66 67 68 69	10·88 10·42 9·96 9·50	11.79 11.27 10.75 10.23 9.70	10·82 10·32 9·83 9·36 8·90	11·012 10·489 9·977 9·475 8·980	11·216 10·685 10·169 9·667 9·180	10·99 10·47 9·96 9·47 9·00	65 66 67 68 69
70 71 72 73 74	8.60 8.17 7.74 7.33 6.92	9·18 8·65 8·16 7·72 7·33	8·45 8·03 7·62 7·22 6·85	8·495 8·026 7·575 7·148 6·749	8·708 8·251 7·810 7·384 6·974	8·53 8·09 7·66 7·25 6·86	70 71 72 73 74
75 76 77 78 79	6·54 6·18 5·83 5·48 5·11	7·01 6·69 6·40 6·12 5·80	6·49 6·15 5·82 5·51 5·21	6·376 6·017 5·674 5·344 5·025	6·579 6·200 5·836 5·488 5·154	6·49 6·14 5·80 5·49 5·19	75 76 77 78 79
80 81 82 83 84	4.75 4.41 4.09 3.80 3.58	5·51 5·21 4·93 4·65 4·39	4·93 4·66 4·41 4·17 3·95	4·719 4·433 4·171 3·930 3·713	4.837 4.533 4.245 3.971 3.711	4·90 4·64 4·39 4·15 3·93	80 81 82 83 84
85 86 87 88 89	3·37 3·19 3·01 2·86 2·66	4·12 3·90 3·71 3·59 3·47	3.73 3.53 3.34 3.16 3.00	3.511 3.310 3.101 2.884 2.634	3·465 3·233 3·014 2·808 2·614	3·72 3·51 3·33 3·15 3·00	85 86 87 88 89
90 91 92 93 94	2·41 2·09 1·75 1·37 1·05	3·28 3·26 3·37 3·48 3·53	2·84 2·69 2·55 2·41 2·29	2·357 2·077 1·795 1·496 1·204	2·431 2·262 2·101 1·954 1·813	2·87 2·76 2·67 2·60 2·52	90 91 92 93 94
95 96 97 98 99		3·53 3·46 3·28 3·07 2·77	2·17 2·06 1·95 1·85 1•76	•930 •684 •500	1.688 1.565 1.466 1.367 1.233	2·43 2·32 2·18 2·01 1·82	95 96 97 98 99

	ENG	LISH LIFE	TABLE, No. 3	3	
Age at Beginning	Number Living	Number Dying during the Year	Number Living of Y	ear	Age at Beginnin
of Year	Beginning of Year	the rear	Males	Females	of Year
0	1,000,000	149,493	511,745	488,255	0
I	850,507	53,680	428,026	422,481	I
2	796,827	28,238	400,505	396,322	2
3	768,589	18,456	386,290	382,299	3
4	750,133	13,315	377,077	373,056	4
5 6	736,818	9,899	370,358	366,460	5
	726,919	7,768	365,325	361,594	. 5
7 8	719,151	6,559	361,372	357,779	
8	712,592	5,458	358,062	354,530	7 8
9	707,134	4,625	355,328	351,806	9
10	702,509	4,028	353,031	349,478	10
II	698,481	3,637	351,048	347,433	II
12	694,844	3,431	349,272	345,572	12
13	691,413	3,382	347,606	343,807	13
14	688,031	3,468	345,969	342,062	14
15	684,563	3,669	344,290	340,273	15
16	680,894	3,957	342,509	338,385	16
17	676,937	4,317	340,581	336,356	17
18	672,620	4,720	338,469	334,151	18
19	667,900	5,150	336,149	331,751	19
20	662,750	5,583	333,608	329,142	20
21	657,167	5,668	330,844	326,323	21
22	651,499	5,748	328,043	323,456	22
23	645,751	5,820	325,207	320,544	23
24	639,931	5,886	322,339	317,592	24
25	634,045	5,950	319,442	314,603	25
26	628,095	6,009	316,516	311,579	26
27	622,086	6,065	313,562	308,524	27
28	616,021	6,121	310,581	305,440	28
29	609,900	6,176	307,572	302,328	29
30	603,724	6,231	304,534	299,190	30
31	597,493	6,287	301,466	296,027	31
32	591,206	6,343	298,366	292,840	32
33	584,863	6,404	295,232	289,631	33
34	578,459	6,466	292,061	286,398	34
35	571,993	6,533	288,850	283,143	35
36 37	565,460	6,601	285,596	279,864	36
37 38	558,859 552,181	6,678 6,756	282,296	276,563	37
39	545,425	6,841	278,944 275,538	273,237 269,887	38
			1		39
40 41	538,584 531,653	6,931 7,027	272,073	266,511	40
42	524,626	7,027	268,544 264,948	263,109 259,678	41
43	517,499	7,127	261,280	259,078	42
44	510,263	7,348	257,534	252,729	43
45					
45	502,915 495,448	7,467 7,592	253,708	249,207	45
47	487,856	7,592 7,722	249,796 245,795	245,652 242,061	46
47 48	480,134	7,857	245,795	238,434	47
49	472,277	7,997	237,508	234,769	49

For explanation see pp. (35-37).

ENGLISH LIFE TABLE, No. 3							
Age at Beginning	Number Living at	Number Dying during	Number Living of Y	g at Beginning Year	Age at Beginnin		
of Year	Beginning of Year	the Year	Males	Females	of Year		
50	464,280	8,141	233,216	231,064	F0		
51	456,139	8,414	228,821	227,318	50 51		
52	447,725	8,590	224,195	223,530	52		
53	439,135	8,761	219,437	219,698			
54	430,374	9,259	214,552	215,822	53 54		
	421,115				-		
55 56	411,532	9,583	209,539	211,576	55		
	401,623	9,909	204,395	207,137	56		
57 58		10,245	199,114	202,509	57		
	391,378	10,593	193,686	197,692	58		
59	380,785	10,958	188,102	192,683	59		
60	369,827	11,338	182,350	187,477	60		
61	358,489	11,737	176,421	182,068	61		
62	346,752	12,149	170,303	176,449	62		
63	334,603	12,572	163,989	170,614	63		
64	322,031	13,002	157,474	164,557	64		
65	309,029	13,430	150,754	158,275	65		
66	295,599	13,846	143,833	151,766	66		
67	281,753	14,244	136,718	145,035	67		
68	267,509	14,607	129,421	138,088	68		
69	252,902	14,925	121,963	130,939	69		
			., ,		1		
70	237,977	15,184	114,370	123,607	70		
71	222,793	15,369	106,675	116,118	71		
72	207,424	15,468	98,919	108,505	72		
73	191,956	15,469	91,149	100,807	73		
74	176,487	15,363	83,416	93,071	74		
75 76	161,124	15,136	75,777	85,347	75		
76	145,988	14,789	68,294	77,694	76		
77 78	131,199	14,319	61,026	70,173	77		
	116,880	13,726	54,036	62,844	77 78		
79	103,154	13,021	47,381	55,773	79		
80	90,133	12,214	41,115	49,018	80		
81	77,919	11,320	35,283	42,636	81		
82	66,599	10,358	29,922	36,677	82		
83	56,241	9,352	25,060	31,181	83		
84	46,889	8,324	20,71	26,178	84		
85	38,565	7,300	16,877		•		
86	31,265	6,298		21,688	85		
87	24,967		13,549	17,716	86		
88	19,621	5,346	10,709	14,258	87		
89	15,162	4,459 3,653	8,325 6,360	11,296 8,802	88		
					89		
90	11,509	2,933	4,770	6,739	90		
91	8,576	2,310	3,510	5,066	91		
92	6,266	1,781	2,531	3,735	92		
93	4,485	1,343	1,787	2,698	93		
94	3,142	989	1,234	1,908	94		
95 96	2,153	713	833	1,320	95		
	1,440	500	548	892	96		
97 98	940	342	352	588	97		
99	598	228	220	378	98		
99	***	370	***	400	99		

INSTITUTE OF ACTUARIES MORTALITY TABLE

HEALTHY MALES (HM.)

Age at Begin-	Number Living	Number Dying		out of every 100 inning of a Year	Age at Begin-
ning of Year	at Beginning of Year	during the Year	who will Survive the Year	who will Die during the Year	ning of Year
I	2	3	4	5	6
10	100,000	490	99.5100	·4900	10
11	99,510	397	99.6010	·3990	11
12	99,113	329	99.6681	·3319	12
13	98,784	288	99.7085	·2915	13
14	98,496	272	99.7238	·2762	14
15 16 17 18	98,224 97,942 97,624 97,245 96,779	282 318 379 466 556	99.7129 99.6753 99.6118 99.5208 99.4255	·2871 ·3247 ·3882 ·4792 ·5745	15 16 17 18
20	96,223	609	99°3671	·6329	20
21	95,614	643	99°3275	·6725	21
22	94,971	650	99°3156	·6844	22
23	94,321	638	99°3236	·6764	23
24	93,683	622	99°3361	·6639	24
25	93,061	617	99°3370	•6630	25
26	92,444	618	99°3315	•6685	26
27	91,826	634	99°3096	•6904	27
28	91,192	654	99°2828	•7172	28
29	90,538	673	99°2567	•7433	29
30	89,865	694	99 ²²⁷⁷	·7723	30
31	89,171	706	99 ²⁰⁸³	·7917	31
32	88,465	717	99 ¹⁸⁹⁵	·8105	32
33	87,748	727	99 ¹⁷¹⁵	·8285	33
34	87,021	740	99 ¹⁴⁹⁶	·8504	34
35 36 37 38 39	86,281 85,524 84,745 83,943 83,122	757 779 802 821 838	99°1226 99°0891 99°0220 98°9918	·8774 ·9109 ·9464 ·9780 1·0082	35 36 37 38 39
40	82,284	848	98·9694	1.0306	40
41	81,436	854	98·9513	1.0487	41
42	80,582	865	93·9266	1.0734	42
43	79,717	887	98·8873	1.1127	43
44	78,830	911	98·8444	1.1556	44
45	77,919	950	98·7808	1·2192	45
46	76,969	996	98·7060	1·2940	46
47	75,973	1,041	98·6298	1·3702	47
48	74,932	1,082	98·5560	1·4440	48
49	73,850	1,124	98·4780	1·5220	49
50	72,726	1,160	98·4050	1·5950	50
51	71,566	1,193	98·3330	1·6670	51
52	70,373	1,235	98·2451	1·7549	52
53	69,138	1,286	98·1400	1·8600	53
54	67,852	1,339	98·0266	1·9734	54

For explanation see pp. (35-37).

INSTITUTE OF ACTUARIES MORTALITY TABLE

HEALTHY MALES (HM.)

Age at Begin-	Number Living	Number Dying		r out of every 100 inning of a Year	Age at Begin-
ning of Year	at Beginning of Year	during the Year	who will Survive the Year	who will Die during the Year	ning of Year
I	2	3	4	5	6
55	66,513	1,399	97.8967	2·1033	55
56	65,114	1,462	97.7547	2·2453	56
57	63,652	1,527	97.6010	2·3990	57
58	62,125	1,592	97.4374	2·5626	58
59	60,533	1,667	97.2461	2·7539	59
60	58,866	1,747	97.0322	2·9678	60
61	57,119	1,830	96.7962	3·2038	61
62	55,289	1,915	96.5364	3·4636	62
63	53,374	2,001	96.2510	3·7490	63
64	51,373	2,076	95.9590	4·0410	64
65	49,297	2,141	95.6569	4.3431	65
66	47,156	2,196	95.3431	4.6569	66
67	44,960	2,243	95.0111	4.9889	67
68	42,717	2,274	94.6766	5.3234	68
69	40,443	2,319	94.2660	5.7340	69
70	38,124	2,371	93.7808	6·2192	70
71	35,753	2,433	93.1950	6·8050	71
72	33,320	2,497	92.5060	7·4940	72
73	30,823	2,554	91.7140	8·2860	73
74	28,269	2,578	90.8805	9·1195	74
75	25,691	2,527	90°1639	9.8361	75
76	23,164	2,464	89°3628	10.6372	76
77	20,700	2,374	88°5314	11.4686	77
78	18,326	2, 258	87°6787	12.3213	78
79	16,068	2, 138	86°6941	13.3059	79
80	13,930	2,015	85°5348	14·4652	80
81	11,915	1,883	84°1964	15·8036	81
82	10,032	1,719	82°8648	17·1352	82
83	8,313	1,545	81°4147	18·5853	83
84	6,768	1,346	80°1123	19·8877	84
85	5,422	1,138	79 °0115	20.9885	85
86	4,284	941	78 °0345	21.9655	86
87	3,343	773	76 °8770	23.1230	87
88	2,570	615	76 °0700	23.9300	88
89	1,955	495	74 °6804	25.3196	89
90	1,460	408	72.0548	27·9452	90
91	1,052	329	68.7263	31·2737	91
92	723	254	64.8686	35·1314	92
93	469	195	58.4222	41·5778	93
94	274	139	49.2700	50·7300	94
95	135	86	36·2964	63.7036	95
96	49	40	18·3673	81.6327	96
97	9	9	00·0000	100.0000	97

	BRITISH	OFFICES IN	MORTALITY TA	ABLE OM	
Age at Begin- ning	Number Living at Beginning	Number Dying during		r out of every 100 inning of a Year	Age at Begin- ning
of	of Year	the	who will Survive	who will Die	of
Year		Year	the Year	during the Year	Year
1	2	3	4	5	6
10	100,000	338	99.662	·338	10
11	99,662	340	99.659	·341	11
12	99,322	343	99.655	·345	12
13	98,979	346	99.650	·350	13
14	98,633	349	99.646	·354	14
15	98,284	354	99.640	·360	15
16	97,930	359	99.633	·367	16
17	97,571	366	99.625	·375	17
18	97,205	372	99.617	·383	18
19	96,833	380	99.608	·392	19
20	96,453	390	99·596	·404	20
21	96,063	400	99·584	·416	21
22	95,663	412	99·569	·431	22
23	95,251	425	99·554	·446	23
24	94,826	439	99·537	·463	24
25	94,387	454	99.519	·481	25
26	93,933	470	99.500	·500	26
27	93,463	489	99.477	·523	27
28	92,974	506	99.456	·544	28
29	92,468	526	99.431	·569	29
30	91,942	547	99°405	•595	30
31	91,395	567	99°380	•620	31
32	90,828	589	99°352	•648	32
33	90,239	611	99°323	•677	33
34	89,628	633	99°294	•706	34
35	88,995	657	99·262	·738	35
36	88,338	681	99·229	·771	36
37	87,657	705	99·196	·804	37
38	86,952	729	99·162	·838	38
39	86,223	756	99·123	·877	39
40	85,467	782	99·085	·915	40
41	84,685	810	99·044	·956	41
42	83,875	840	98·999	I·001	42
43	83,035	870	98·952	I·048	43
44	82,165	903	98·901	I·099	44
45	81,262	937	98·847	1·153	45
46	80,325	974	98·787	1·213	46
47	79,351	1,013	98·723	1·277	47
48	78,338	1,054	98·655	1·345	48
49	77,284	1,099	98·578	1·422	49
50	76,185	1,146	98·496	1·504	50
51	75,039	1,197	98·405	1·595	51
52	73,842	1,250	98·307	1·693	52
53	72,592	1,306	98·201	1·799	53
54	71,286	1,367	98·082	1·918	54

For explanation see pp. (35-37).

BRITISH OFFICES MORTALITY TABLE OM								
Age at Begin- ning of Year	Number Living at Beginning of Year	Number Dying during the Year	Probable Number out of every 100 Alive at the Beginning of a Year		Age at Begin-			
			who will Survive	who will Die during the Year	ning of Year			
1	2	3	4	5	6			
55	69,919	1,430	97·955	2·045	55			
56	68,489	1,496	97·816	2·184	56			
57	66,993	1,566	97·662	2·338	57			
58	65,427	1,639	97·495	2·505	58			
59	63,788	1,715	97·311	2·689	59			
60	62,073	1,792	97·113	2·887	60			
61	60,281	1,872	96·895	3·105	61			
62	58,409	1,953	96·656	3·344	62			
63	56,456	2,034	96·397	3·603	63			
64	54,422	2,115	96·114	3·886	64			
65	52,307	2,195	95·804	4·196	65			
66	50,112	2,271	95·468	4·532	66			
67	47,841	2,344	95·100	4·900	67			
68	45,497	2,411	94·701	5·299	68			
69	43,086	2,471	94·265	5·735	69			
70	40,615	2,521	93·793	6·207	70			
71	38,094	2,561	93·277	6·723	71			
72	35,533	2,587	92·719	7·281	72			
73	32,946	2,600	92·108	7·892	73			
74	30,346	2,594	91·452	8·548	74			
75	27,752	2,571	90·736	9·264	75			
76	25,181	2,529	89·957	10·043	76			
77	22,652	2,465	89·118	10·882	77			
78	20,187	2,381	88·205	11·795	78			
79	17,806	2,276	87·218	12·782	79			
80	15,530	2,150	86·156	13.844	80			
81	13,380	2,007	85·000	15.000	81			
82	11,373	1,847	83·760	16.240	82			
83	9,526	1,674	82·427	17.573	83			
84	7,852	1,493	80·986	19.014	84			
85	6,359	1,308	79·431	20·569	85			
86	5,051	1,122	77·787	22·213	86			
87	3,929	943	75·999	24·001	87			
88	2,986	773	74·113	25·887	88			
89	2,213	617	72·119	27·881	89			
90	1,596	480	69·925	30·075	90			
91	1,116	360	67·742	32·258	91			
92	756	263	65·212	34·788	92			
93	493	183	62·880	37·120	93			
94	310	124	60·000	40·000	94			
95	186	79	57·527	42.473	95			
96	107	49	54·206	45.794	96			
97	58	28	51·724	48.276	97			
98	30	15	50·000	50.000	98			
99	15	8	46·667	53.333	99			
100	7	4	42·857	57·143	100			
101	3	2	33·333	66·667	101			
102	1	1	0·000	100·000	102			

CARLISLE TABLE								
Age at	Number Living	Number Dying	Age at	Number Living	Number Dying			
Beginning	at Beginning	during the	Beginning	at Beginning	during the			
of Year	of Year	Year	of Year	of Year	Year			
0	10,000	1,539	50	4,397	59			
I	8,461	682	51	4,338	62			
3 4	7,779	505	52	4,276	65			
	7,274	276	53	4,211	68			
	6,998	201	54	4,143	70			
5 6 7 8	6,797 6,676 6,594 6,536 6,493	121 82 58 43 33	55 56 57 58 59	4,073 4,000 3,924 3,842 3,749	73 76 82 93			
10 11 12 13	6,460 6,431 6,400 6,368 6,335	33 29 31 32 33 35	60 61 62 63 64	3,643 3,521 3,395 3,268 3,143	122 126 127 125			
15 16 17 18	6,300 6,261 6,219 6,176 6,133	39 42 43 43 43	65 66 67 68 69	3,018 2,894 2,771 2,648 2,525	124 123 123 123 123			
20 21 22 23 24	6,090 6,047 6,005 5,963 5,921	43 42 42 42 42 42	70 71 72 73 74	2,40I 2,277 2,143 1,097 1,841	124 134 146 156 166			
25	5,879	43	75	1,675	160			
26	5,836	43	76	1,515	156			
27	5,793	45	77	1,359	146			
28	5,748	50	78	1,213	132			
29	5,698	56	79	1,081	128			
30	5,642	57	80	953	116			
31	5,585	57	81	837	112			
32	5,528	56	82	725	102			
33	5,472	55	83	623	94			
34	5,417	55	84	529	84			
35	5,362	55	85	445	78			
36	5,307	56	86	367	71			
37	5,251	57	87	296	64			
38	5,194	58	88	232	51			
39	5,136	61	89	181	39			
40	5,075	60	90	142	37			
41	5,009	69	91	105	30			
42	4,940	71	92	75	21			
43	4,869	71	93	54	14			
44	4,798	71	94	40	10			
45 46 47 48 49	4,727 4,657 4,588 4,521 4,458	70 69 67 63 61	95 96 97 98	30 23 18 14	7 5 4 3 2			

For explanation see pp. (35-37). (266)

TABLES

COMBINING

MORTALITY OF SINGLE LIVES

AND

INTEREST

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE NORTHAMPTON TABLE OF MORTALITY

Age	3 %	4%	5 %	6 %	Age
1	16·021	13.465	11·563	10·107	1
2	18·599	15.633	13·420	11·724	2
3	19·575	16.462	14·135	12·348	3
4	20·210	17.010	14·613	12·769	4
5	20·473	17.248	14·827	12·962	5
6 7 8 9	20.727 20.853 20.885 20.812 20.663	17·482 17·611 17·662 17·625 17·523	15.041 15.166 15.226 15.210 15.139	13·156 13·275 13·337 13·335 13·285	6 7 8 9
11	20·480	17·393	15.043	13·212	11
12	20·283	17·251	14.937	13·130	12
13	20·081	17·103	14.826	13·044	13
14	19·872	16·950	14.710	12·953	14
15	19·657	16·791	14.588	12·857	15
16	19.435	16·625	14·460	12.755	16
17	19.218	16·462	14·334	12.655	17
18	19.013	16·309	14·217	12.562	18
19	18.820	16·167	14·108	12.477	19
20	18.638	16·033	14·007	12.398	20
21 22 23 24 25	18·470 18·311 18·148 17·983 17·814	15·912 15·79 7 15·680 15·560 15·438	13.917 13.833 13.746 13.658	12·329 12·265 12·200 12·132 12·063	21 22 23 24 25
26	17·642	15·312	13.473	11.992	26
27	17·467	15·184	13.377	11.917	27
28	17·289	15·053	13.278	11.841	28
29	17·107	14·918	13.177	11.763	29
30	16·922	14·781	13.072	11.682	30
31	16·732	14.639	12·965	11.598	31
32	16·540	14.495	12·854	11.512	32
33	16·343	14.347	12·740	11.423	33
34	16·142	14.195	12·623	11.331	34
35	15·938	14.039	12·502	11.236	35
36	15·729	13.880	12·377	11.137	36
37	15·515	13.716	12·249	11.035	37
38	15·298	13.548	12·116	10.929	38
39	15·075	13.375	11·979	10.819	39
40	14·848	13.197	11·837	10.705	40
41	14·620	13.018	11.695	10·589	41
42	14·391	12.838	11.551	10·473	42
43	14·162	12.657	11.407	10·356	43
44	13·929	12.472	11.258	10·235	44
45	13·692	12.283	11.105	10·110	45

For explanation see pp. (37-3).

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE NORTHAMPTON TABLE OF MORTALITY

Age	3 %	4%	5 %	6 %	Age
46	13.450	12.089	10·947	9·980	46
47	13.203	11.890	10·784	9·846	47
48	12.951	11.685	10·616	9·707	48
49	12.693	11.475	10·443	9·563	49
50	12.436	11.264	10·269	9·417	50
51 52 53 54 55	12·183 11·930 11·674 11·414 11·150	11.057 10.849 10.637 10.421 10.201	9.925 9.748 9.567 9.382	9°273 9°129 8°980 8°827 8°670	51 52 53 54 55
56	10·882	9 [.] 977	9·193	8·509	56
57	10·611	9 [.] 749	8·999	8·343	57
58	10·337	9 [.] 516	8·801	8·173	58
59	10·058	9 [.] 280	8·599	7·999	59
60	9·777	9 [.] 039	8·392	7·820	60
61	9'493	8·795	8·181	7.637	61
62	9'205	8·547	7·966	7.449	62
63	8'910	8·291	7·742	7.253	63
64	8'611	8·030	7·514	7.052	64
65	8'304	7·761	7·276	6.841	65
66	7·994	7.488	7.034	6·625	66
67	7·682	7.211	6.787	6·405	67
68	7·367	6.930	6.536	6·179	68
69	7·051	6.647	6.281	5·949	- 69
70	6·734	6.361	6.023	5·716	70
71	6.418	6.076	5.764	5.479	71
72	6.103	5.790	5.504	5.241	72
73	5.794	5.507	5.245	5.004	73
74	5.491	5.230	4.990	4.769	74
75	5.199	4.962	4.744	4.542	75
76	4.925	4.710	4.511	4.326	76
77	4.652	4.457	4.277	4.109	77
78	4.372	4.197	4.035	3.884	78
79	4.077	3.921	3.776	3.641	79
80	3.781	3.643	3.515	3.394	80
81	3.499	3 377	3·263	3°156	81
82	3.229	3 122	3·020	2°926	82
83	2.982	2 887	2·797	2°713	83
84	2.793	2 708	2·627	2°551	84
85	2.620	2 543	2·471	2°402	85
86	2.462	2·393	2·328	2·266	86
87	2.312	2·251	2·193	2·138	87
88	2.185	2·131	2·080	2·031	88
89	2.013	1·967	1·924	1·882	89
90	1.794	1·758	1·723	1·689	90

VAL	UE OF AN	ANNUIT	Y ON A S	INGLE LI	FE ACCOR	DING TO	THE
Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
1 2 3 4 5	20.085 21.501 22.683 23.285 23.693	16·556 17·728 18·717 19·233 19·594	13.995 14.983 15.824 16.271 16.590	12.078 12.925 13.652 14.042 14.325	10.605 11.342 11.978 12.322 12.574	9.439 10.088 10.651 10.957 11.184	1 2 3 4 5
6 7 8 9	23.846 23.867 23.801 23.677 23.512	19.747 19.792 19.766 19.693 19.585	16·735 16·790 16·786 16·742 16·669	14.460 14.518 14.526 14.500 14.448	12.698 12.756 12.770 12.754 12.717	11·298 11·354 11·371 11·362 11·334	6 7 8 9
11 12 13 14 15	23.327 23.143 22.957 22.769 22.582	19.460 19.336 19.210 19.082	16·581 16·494 16·406 16·316 16·227	14.384 14.321 14.257 14.191 14.126	12.669 12.621 12.572 12.522 12.473	11·296 11·259 11·221 11·182	11 12 13 14
16 17 18 19 20	22.404 22.232 22.058 21.879 21.694	18.837 18.723 18.608 18.488 18.363	16·144 16·066 15·987 15·904 15·817	14.067 14.012 13.956 13.897 13.835	12·429 12·389 12·348 12·305 12·259	11.019 11.021 11.021 11.111	16 17 18 19 20
21 22 23 24 25	21.504 21.304 21.098 20.885 20.665	18·233 18·095 17·951 17·801 17·645	15.726 15.628 15.525 15.417 15.303	13.769 13.697 13.621 13.541 13.456	12·210 12·156 12·037 11·972	10.948 10.906 10.861 10.813 10.762	21 22 23 24 25
26 27 28 29 30	20.442 20.212 19.761 19.556	17:486 17:320 17:154 16:997 16:852	15·187 15·065 14·942 14·827 14·723	13·368 13·275 13·182 13·096 13·020	11.904 11.832 11.759 11.693	10.709 10.652 10.594 10.542 10.498	26 27 28 29 30
31 32 33 34 35	19·348 19·134 18·910 18·675 18·433	16.705 16.552 16.390 16.219 16.041	14.617 14.506 14.387 14.260	12.942 12.860 12.771 12.675 12.573	11.578 11.516 11.448 11.374 11.295	10.454 10.407 10.355 10.297 10.235	31 32 33 34 35
36 37 38 39 40	18·183 17·928 17·669 17·405 17·143	15.856 15.666 15.471 15.272 15.074	13.987 13.843 13.695 13.542 13.390	12.465 12.354 12.239 12.120 12.002	11.511 11.124 11.033 10.939 10.845	10·168 10·098 10·026 9·950 9·875	36 37 38 39 40
41 42 43 44 45	16.890 16.640 16.389 16.130 15.863	14.883 14.694 14.505 14.308	13.245 13.101 12.957 12.806 12.648	11.890 11.779 11.668 11.551 11.428	10.757 10.671 10.585 10.494 10.397	9 ° 7 3 7 9 ° 6 6 9 ° 5 9 7 9 ° 5 2 0	41 42 43 44 45
46 47 48 49 50	15·585 15·294 14·986 14·654 14·303	13.889 13.662 13.419 13.153 12.869	12·480 12·301 12·107 11·892 11·660	11 ·154 10 ·998 10 ·823 10 ·631	10·292 10·178 10·052 9·908 9·749	9 320 9 436 9 344 9 241 9 121 8 987	45 46 47 48 49 50

For explanation see pp. (37-39).

VAL	UE OF AN	ANNUIT	Y ON A S LE TABLE	INGLE LI E OF MOR	FE ACCOR	DING TO	THE
Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
51 52 53 54 55	13.932 13.558 13.180 12.798 12.408	12·566 12·258 11·945 11·627 11·300	11.410 11.154 10.892 10.624 10.347	10°422 10°208 9°988 9°761 9°524	9:573 9:392 9:205 9:011 8:807	8.838 8.684 8.523 8.356 8.179	51 52 53 54 55
56 57 58 59 60	12.014 11.614 11.218 10.841 10.491	10.966 10.625 10.286 9.963 9.663	9.771 9.478 9.199 8.940	9°280 9°027 8°772 8°529 8°304	8·595 8·375 8·153 7·940 7·743	7·995 7·802 7·606 7·418 7·245	56 57 58 59 60
61 62 63 64 65 66	9.875 9.567 9.246 8.917	9°398 9°137 8°872 8°593 8°307	8·712 8·487 8·258 8·016 7·765	8·108 7·913 7·714 7·502 7·281	7·572 7·403 7·229 7·042 6·847	7.095 6.947 6.795 6.630 6.457	61 62 63 64 65
67 68 69 70	8·578 8·228 7·869 7·499 7·123	8.010 7.700 7.380 7.049 6.709	7.503 7.227 6.941 6.643 6.336	7.049 6.803 6.546 6.277 5.998	6.641 6.421 6.189 5.945 5.690	6·272 6·075 5·866 5·643 5·410	66 67 68 69 70
71 72 73 74 75	6.737 6.373 6.044 5.752 5.512	6·358 6·026 5·725 5·458 5·239	6.015 5.435 5.190 4.989	5.704 5.424 5.170 4.944 4.760	5.420 5.162 4.927 4.719 4.549	5·160 4·922 4·704 4·511 4·355	71 72 73 74 75
76 77 78 79 80	5.277 5.059 4.838 4.592 4.365	5.024 4.825 4.622 4.394 4.183	4.792 4.609 4.422 4.210 4.015	4.579 4.410 4.238 4.040 3.858	4·382 4·227 4·067 3·883 3·713	4·200 4·056 3·908 3·736 3·577	76 77 78 79 80
81 82 83 84 85	4·119 3·898 3·672 3·454 3·229	3.953 3.746 3.534 3.329 3.115	3.799 3.606 3.406 3.211 3.009	3.656 3.474 3.286 3.102 2.909	3.523 3.352 3.174 2.999 2.815	3·398 3·237 3·069 2·903 2·727	81 82 83 84 85
86 87 88 89 90	3.033 2.873 2.776 2.665 2.499	2.928 2.776 2.683 2.577 2.416	2·830 2·685 2·597 2·495 2·339	2·739 2·599 2·515 2·417 2·266	2.652 2.519 2.439 2.344 2.198	2·57I 2·440 2·366 2·276 2·133	86 87 88 89 90
91 92 93 94 95	2·481 2·577 2·687 2·736 2·757	2·398 2·492 2·600 2·650 2·674	2·321 2·412 2·569 2·596	2·248 2·337 2·440 2·492 2·522	2·180 2·266 2·367 2·419 2·451	2·115 2·198 2·297 2·350 2·383	91 92 93 94 95
96 97 98 99 100	2.704 2.559 2.388 2.131 1.683	2.628 2.492 2.332 2.087 1.653	2·555 2·428 2·278 2·045 1·624	2·486 2·368 2·227 2·004 1·596	2:420 2:309 2:177 1:964 1:569	2·358 2·253 2·129 1·926 1 543	96 97 98 99

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE.

Age	2 ½ %	3 %	3½ %	4 %	41 %	5 %	Age
10	26.732	24.148	21.954	20.077	18.459	17.057	10
II	26.535	23.995	21.834	19 982	18.385	16.998	II
12	26.307	23.814	21.689	19.865	18.580	16.919	12
13	26.052	23.610	21.23	19.728	18.176	16.824	13
14	25.785	23.390	21.341	19.578	18.049	16.717	14
15	25.202	23.128	21.149	19.417	17.914	16.602	15
16	25.215	22.922	20.953	19.252	17.774	16.482	16
17	24.930	22.686	20.757	19.087	17.634	16.362	17 18
18	24.653	22.458	20.389	18.780	17.499	16.142	.19
					17.262		
20 21	24.142	22.043	20.066	18·644 18·513	1	16.047	20 21
22	23.669	21.656	19,000	18.384	17.153	15.957	22
23	23.428	21.460	19 909	18.251	16.937	15.776	23
24	23.148	21.254	19.578	18.110	16.819	15.678	24
25	22.016	21.038	19:399	17.961	16.694	15.572	25
26	22.646	20.814	19.212	17.804	16.561	15.460	26
27	22.368	20.582	19.018	17.641	16.423	15.342	27
28	22.086	20.347	18.820	17.474	16.581	15.551	28
29	21.802	20.109	18.620	17.304	16.132	15.097	29
30	21.212	19.867	18.416	17.131	15.989	14.971	30
31	21.224	19.623	18.209	16.955	15.839	14.842	31
32	20.928	19.373	17.996	16.774	15.684	14.708	32
33	20.627	19'117	17.778	16.587	15.23	14.570	33
34	20.319	18.855	17.554	16.395	15.358	14.426	34
35	20.006	18.587	17.325	16.197	15.186	14.277	35
36	19.687	18.314	17.090.	15.994	15.010	14.124	36
37	19.365	18.037	16.850	15.786	14.830	13.966	37
38	19.039	17.756	16.607	15.575	14.645	13.805	38
39	18.708	17.469	16.358	15.358	14.455	13.638	39
40	18.371	17.176	16.103	15.132	14.260	13.466	40
41	18.026	16.876	15.840	14.904	14.056	13.582	41
42	17.672	16.248	15.288	14.664	13.845	13.099	42
43 44	17.311	15'924	15.001	14.417	13.398	12 903	43
45	16.204	15.260	14.707	13.901	13.162	12.491	45
46 47	16.194	14.923	14.410	13.366	12.686	12.061	46 47
48	15.437	14 923	13.806	13.094	12.441	11.840	48
49	15.022	14.242	13.499	12.817	15.101	11.614	49
50	14.669	13.896	13.187	12.536	11.936	11.383	50
51	14.280	13.242	12.870	12.249	11.676	11.146	51
52	13.885	13.188	12.547	11.955	11.408	10.905	52
53	13.486	12.826	12.518	11.655	11.134	10.651	53
54	13.086	12.462	11.882	11.321	10.856	10.396	54

For explanation see pp. (37-39).

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	$2\frac{1}{2}\%$	3 %	31/2%	4%	41/2%	5 %	Age
55 56 57 58 59	12.683 12.279 11.875 11.471	12.094 11.724 11.353 10.981 10.608	11.549 11.210 10.868 10.525 10.180	11.043 10.731 10.417 10.100 9.780	10.573 10.286 9.996 9.702 9.405	10°135 9°871 9°602 9°330 9°054	55 56 57 58 59
60	10.665	10·236	9.835	9°459	9·107	8.776	60
61	10.266	9·866	9.490	9°138	8·808	8.497	61
62	9.871	9·498	9.148	8°818	8·509	8.217	62
63	9.481	9·134	8.807	8°500	8·211	7.938	63
64	9.096	8·774	8.471	8°185	7·914	7.659	64
65	8·716	8.418	8·136	7·870	7.619	7·381	65
66	8·340	8.064	7·803	7·557	7.323	7·102	66
67	7·966	7.712	7·471	7·243	7.026	6·821	67
68	7·594	7.360	7·139	6·928	6.728	6·538	68
69	7·221	7.007	6·804	6·610	6.426	6·251	69
70	6.852	6.657	6.470	6·293	6·124	5.963	70
71	6.489	6.311	6.141	5·979	5·824	5.676	71
72	6.137	5.975	5.820	5·672	5·530	5.395	72
73	5.800	5.653	5.512	5·377	5·247	5.123	73
74	5.482	5.348	5.220	5·097	4·979	4.866	74
75	5·183	5.061	4°945	4.833	4.725	4.622	75
76	4·892	4.782	4°676	4.574	4.476	4.382	76
77	4·611	4.512	4°416	4.324	4.235	4.149	77
78	4·339	4.249	4°162	4.079	3.998	3.921	78
79	4·073	3.992	3°914	3.838	3.765	3.695	79
80	3.815	3.742	3.672	3.604	3.539	3.475	80
81	3.572	3.507	3.444	3.382	3.323	3.266	81
82	3.348	3.290	3.233	3.178	3.125	3.073	82
83	3.142	3.089	3.038	2.989	2.941	2.894	83
84	2.955	2.908	2.862	2.818	2.774	2.732	84
85	2.781	2.739	2·698	2.658	2·619	2·581	85
86	2.608	2.570	2·534	2.498	2·464	2·430	86
87	2.425	2.393	2·361	2.330	2·299	2·270	87
88	2.234	2.206	2·178	2.152	2·125	2·100	88
89	2.010	1.987	1·964	1.942	1·920	1·898	89
90 91 92 93 94	1.758 1.201 1.239 .958 .681	1.740 1.487 1.229 .951	1.722 1.473 1.219 .944 .673	1 '704 1 '459 1 '208 '937 '668	1.686 1.446 1.198 .930 .664	1.669 1.432 1.188 .924 .660	90 91 92 93 94
95 96 97	*418 *179 *000	°415 °178 °000	.413 .128	*411 *177 *000	*408 *176 *000	*406 *175 *000	95 96 97

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE GOVERNMENT EXPERIENCE, 1883

MALES

			20222235			
Age	$2\frac{1}{2}\%$	3 %	$3\frac{1}{2}\%$	4 %	5 %	Age
20 25 30 35 40	22:434 21:282 20:079 18:822 17:501	20·561 19·601 18·588 17·515 16·376	18·936 18·130 17·271 16·353 15·365	 14.454		20 25 30 35 40
41	17·227	16·138	15·158	14·273	12·743	41
42	16·950	15·897	14·947	14·088	12·599	42
43	16·670	15·653	14·733	13·899	12·451	43
44	16·387	15·404	14·514	13·707	12·300	44
45	16·099	15·152	14·292	13·510	12·145	45
46	15.807	14·895	14.065	13·309	11.986	46
47	15.511	14·633	13.833	13·103	11.822	47
48	15.209	14·365	13.595	12·891	11.653	48
49	14.900	14·091	13.351	12·673	11.477	49
50	14.588	13·813	13.103	12·450	11.298	50
51	14·268	13·526	12·845	12·219	11·110	51
52	13·941	13·233	12·582	11·982	10·916	52
53	13·608	12·933	12·311	11·737	10·714	53
54	13·267	12·625	12·032	11·484	10·506	54
55	12·919	12·309	11·746	11·224	10·289	55
56 57 58 59 60	12·563 12·198 11·823 11·439 11·054	11.986 11.926 11.926 10.956	11.451 11.146 10.832 10.506 10.178	10.955 10.676 10.387 10.086 9.783	9.828 9.583 9.326 9.065	56 57 58 59 60
61 62 63 64 65	10.678 10.314 9.948 9.586 9.225	9.916 9.577 9.239 8.902	9·857 9·543 9·228 8·913 8·597	9.485 9.194 8.900 8.605 8.309	8.808 8.556 8.300 8.041 7.781	61 62 63 64 65
66	8·875	8·573	8·289	8·020	7·525	66
67	8·533	8·252	7·987	7·736	7·273	67
68	8·196	7·936	7·689	7·455	7·023	68
69	7·858	7·617	7·388	7·171	6·768	69
70	7·521	7·299	7·087	6·886	6·512	70
71	7·191	6·986	6·790	6.604	6·257	71
72	6·864	6·675	6·495	6.323	6·003	72
73	6·546	6·373	6·208	6.050	5·754	73
74	6·245	6·086	5·934	5.788	5·515	74
75	5·955	5·809	5·669	5.535	5·283	75
76	5.672	5.538	5:410	5.286	5.054	76
77	5.404	5.281	5:163	5.050	4.836	77
78	5.145	5.033	4:925	4.821	4.624	78
79	4.891	4.788	4:689	4.594	4.413	79
80	4.647	4.553	4:463	4.376	4.210	80

For explanation see pp. (37-39).

VALUE OF AN ANNUITY ON A SINGLE LIFE ACCORDING TO THE GOVERNMENT EXPERIENCE, 1883

FEMALES

	a state and a stat										
Age	$2\frac{1}{2}\%$	3 %	3½ %	4%	5 %	Age					
20 25 30 35 40	24.479 23.397 22.223 20.939 19.523	22·292 21·415 20·451 19·380 18·180	20·409 19·695 18·898 18·001 16·980	 15.904		20 25 30 35 40					
41	19·223	17.923	16·758	15:712	13.920	41					
42	18·915	17.658	16·529	15:514	13.769	42					
43	18·601	17.386	16·294	15:310	13.613	43					
44	18·279	17.107	16·051	15:098	13.451	44					
45	17·950	16.820	15·801	14:879	13.281	45					
46	17.612	16·525	15.543	14.652	13·105	46					
47	17.266	16·221	15.276	14.416	12·920	47					
48	16.911	15·910	15.000	14.173	12·727	48					
49	16.552	15·592	14.719	13.923	12·528	49					
50	16.190	15·271	14.434	13.669	12·325	50					
51 52 53 54 55	15.831 15.465 15.091 14.712 14.329	14.952 14.626 14.292 13.951 13.607	14·149 13·859 13·558 13·252 12·942	13.415 13.155 12.885 12.609 12.328	12·121 11·911 11·467 11·467	51 52 53 54 55					
56	13.936	13·252	12·620	12.036	10·994	56					
57	13.538	12·891	12·292	11.738	10·745	57					
58	13.138	12·527	11·960	11.435	10·492	58					
59	12.735	12·160	11·625	11.128	10·233	59					
60	12.333	11·791	11·287	10.818	9·971	60					
61	11.925	11.417	10·943	10·500	9·700	61					
62	11.523	11.046	10·601	10·185	9·429	62					
63	11.120	10.674	10·257	9·866	9·155	63					
64	10.713	10.297	9·907	9·541	8·873	64					
65	10.296	9.909	9·546	9·204	8·579	65					
66	9·880	9·521	9·183	8·865	8·282	66					
67	9·463	9·131	8·818	8·523	7·980	67					
68	9·052	8·745	8·456	8·182	7·678	68					
69	8·650	8·367	8·100	7·847	7·379	69					
70	8·260	8·000	7·754	7·520	7·087	70					
71	7·893	7.654	7·426	7·210	6.809	71					
72	7·539	7.319	7·110	6·910	6.539	72					
73	7·196	6.994	6·801	6·617	6.274	73					
74	6·863	6.677	6·500	6·331	6.014	74					
75	6·537	6.367	6·204	6·048	5.757	75					
76	6·220	6·064	5.915	5.773	5.504	76					
77	5·911	5·769	5.633	5.502	5.256	77					
78	5·613	5·483	5.359	5.240	5.015	78					
79	5·323	5·205	5.092	4.983	4.777	79					
80	5·044	4·937	4.834	4.735	4.547	80					

VALUE	OF	AN	ANN	UITY	ON	A	SINGL	E	LIFE	ACCORDING
		TO	THE	BRIT	ISH	OI	FICES	Т	ABLE	

Age	2½°/。	3 °/。	$3\frac{1}{2}$ $^{\circ}/_{\circ}$	4 °/。	5 °/ _°	6 °/ _°	Age
10	27.354	24.669	22.393	20.450	17:331	14-964	10
11	27.133	24.496	22.256	20.340	17.259	14.916	11
12	26.906	24.317	22.114	20.226	17.184	14.864	12
13	26.675	24.133	21.967	20.108	17.106	14.811	13
14	26.437	23.945	21.816	19.986	17.024	14.755	14
15	26.194	23.751	21.660	19.859	16.939	14.696	15
16	25.947	23.552	21.499	19.728	16.850	14.634	16
17	25.692	23.347	21.333	19.593	16.758	14.569	17
18	25.434	23.138	21.163	19.453	16.662	14.201	18
19	25.170	22.924	20.987	19.309	16.562	14.430	19
20	24.901	22.705	20.808	19·160	16.458	14.356	20
21	24.627	22.481	20.623	19.007	16.351	14.279	21
22	24 348	22.252	20.434	18.851	16.241	14.200	22
23	24.065	22.019	20.241	18.690	16.127	14.117	23
24	23.777	21.781	20.044	18.524	16.009	14.031	24
25	23.484	21.539	19.842	18.355	15.888	13.942	25
26	23.188	21.292	19.635	18.181	15.763	13.850	26
27	22.888	21.041	19.425	18.004	15.634	13.754	27
28	22.583	20.786	19.211	17.822	15.503	13.657	28
29	22.275	20.527	18.992	17.637	15.367	13.555	29
30	21.962	20-264	18.769	17.447	15.228	13.451	30
31	21.646	19.996	18.542	17.253	15.084	13.343	31
32	21.325	19.725	18.311	17.056	14.937	13.232	32
33	21.001	19.449	18.075	16.854	14.787	13.118	33
34	20.673	19.169	17.835	16.647	14.632	12.999	34
35	20.340	18.885	17.591	16.436	14.472	12.877	35
36	20.004	18.596	17.342	16.220	14.309	12.751	36
37	19.663	18.303	17.088	16.001	14.141	12.622	37
3 8	19.319	18.004	16.830	15.776	13.969	12.487	38
39	18.969	17.702	16.566	15.245	13.792	12.348	39
40	18.615	17:394	16.298	15.310	13.609	12.205	40
41	18.257	17.081	16.024	15.070	13.421	12.057	41
42	17.894	16.764	15.745	14.824	13.229	11.904	42
43	17.526	16.441	15.461	14.572	13.031	11.745	43
44	17.155	16.114	15.172	14.316	12.827	11.281	44
45	16.780	15.782	14.877	14.054	12.618	11.413	45
46	16.399	15.445	14.577	13.786	12.403	11.239	46
47	16.016	15.104	14.272	13.214	12.183	11.000	47
48	15.628	14.757	13.963	13.236	11.958	10.875	48
49	15.238	14.408	13.649	12.953	11.727	10.684	49
50	14.844	14.054	13.330	12.666	11.491	10.489	50
51	14.447	13.697	13.008	12.374	11.250	10.288	51
52	14.049	13.336	12.681	12.077	11.004	10.082	52
53	13.648	12.973	12.351	11.777	10.753	9•871	53
54	13.245	12.607	12.017	11.472	10.497	9.655	54

For explanation see pp. (37-39). (276)

	VALUE OF		UITY ON BRITISH		LIFE ACC	CORDING	
Age	2½°/。	3 °/。	$3\frac{1}{2}$ °/ $_{\circ}$	4 °/。	5 °/。	6 °/。	Age
55	12·842	12·239	11.681	11·164	10·238	9:434	55
56	12·438	11·869	11.343	10·853	9·974	9:209	56
57	12·033	11·498	11.001	10·539	9·707	8:980	57
58	11·629	11·127	10.659	10·223	9·436	8:746	58
59	11·226	10·755	10.316	9·905	9·163	8:509	59
60	10·825	10·384	9·972	9·586	8.886	8·269	60
61	10·425	10·013	9·627	9·266	8.608	8·026	61
62	10·028	9·644	9·284	8·946	8.328	7·780	62
63	9·635	9·277	8·941	8·625	8.047	7·532	63
64	9·245	8·913	8·600	8·306	7.765	7·282	64
65	8.859	8·551	8·261	7·987	7·483	7·031	65
66	8.478	8·194	7·925	7·670	7·202	6·780	66
67	8.103	7·840	7·591	7·356	6·920	6·528	67
68	7.733	7·491	7·262	7·044	6·641	6·276	68
69	7.370	7·148	6·937	6·736	6·363	6·025	69
70 71 72 73 74	7.014 6.665 6.324 5.991 5.667	6.810 6.479 6.154 5.836 5.526	6.616 6.301 5.688 5.391	6·431 6·131 5·836 5·546 5·262	6.088 5.815 5.546 5.281 5.020	5.775 5.526 5.280 5.036 4.796	70 71 72 73 74
75	5·352	5·224	5·102	4.984	4.763	4.559	75
76	5·045	4·930	4·819	4.713	4.512	4.326	76
77	4·749	4·645	4·545	4.449	4.266	4.097	77
78	4·462	4·368	4·278	4.191	4.027	3.873	78
79	4·185	4·101	4·020	3.942	3.794	3.655	79
80	3.918	3·843	3.771	3.701	3·567	3.442	80
81	3.662	3·595	3.530	3.467	3·347	3.235	81
82	3.416	3·356	3.298	3.242	3·135	3.034	82
83	3.180	3·127	3.075	3.025	2·930	2.840	83
84	2.954	2·907	2.861	2.817	2·732	2.652	84
85	2·739	2·697	2.657	2·618	2·542	2·471	85
86	2·534	2·498	2.462	2·427	2·361	2·297	86
87	2·340	2·307	2.276	2·245	2·186	2·130	87
88	2·155	2·127	2.100	2·073	2·021	1·971	88
89	1·981	1·956	1.932	1·909	1·863	1·819	89
90	1.816	1·794	1.773	1.752	1.712	1.674	90
91	1.661	1·643	1.624	1.606	1.571	1.538	91
92	1.514	1·497	1.481	1.466	1.435	1.406	92
93	1.379	1·365	1.351	1.338	1.311	1.286	93
94	1.248	1·236	1.224	1.212	1.190	1.168	94
95 96 97 98 99	1·133 1·018 ·925 ·833 ·708	1·122 1·009 ·917 ·826 ·703	1·112 1·000 ·910 ·820 ·698	·991 ·902 ·814 ·693	1.082 .974 .887 .802 .683	1.063 .958 .873 .790 .674	95 96 97 98 99
100	°554	·551	·547	*544	·538	·531	100
101	°325	·324	·322	*321	·317	·314	101

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE NORTHAMPTON TABLE OF MORTALITY

Age	3 °/。	4 °/。	5 °/。	6 °/。	Age
8	•36255 •36469	•28219 •28362	•22733 •22810	•18847 •18858	8 9
10	•36903	•28751	•23148	•19142	10
11	•37437	•29252	•23605	•19555	11
12	•38009	•29799	•24110	•20019	12
13	•38598	•30365	•24638	•20506	13
14	•39206	•30955	•25191	•21021	14
15	*3983 2 *40478 *41112 *41710 *42270	•31568	·25771	·21564	15
16		•32206	·26381	·22142	16
17		•32832	·26981	·22708	17
18		•33419	·27538	·23234	18
19		•33965	·28057	·23716	19
20	*42801	*34479	•28538	•24162	20
21	*43289	*34946	•28967	•24553	21
22	*43754	*35386	•29367	•24915	22
23	*44228	*35836	•29781	•25283	23
24	*44710	*36296	•30200	•25668	24
25	·45201	•3676 7	•30633	·26059	25
26	·45702	•37249	•31081	·26461	26
27	·46212	•37742	•31538	·26885	27
28	·46731	•38247	•32010	·27315	28
29	·47261	•38765	•32491	·27757	29
30	•47801	*39294	*32991	·28215	30
31	•48352	*39837	*33500	·28691	31
32	•48913	*40394	*34029	·29177	32
33	•49486	*40964	*34571	·29681	33
34	•50070	*41557	*35129	·30202	34
35	•50667	·42148	*35705	·30740	35
36	•51275	·42764	*36300	·31300	36
37	•51897	·43395	*36910	·31877	37
38	•52531	·44044	*37543	·32477	38
39	•53180	·44710	*38195	·33100	39
40	•53842	*4539 5 *46083 *46775 *47469 *48196	•38871	*33745	40
41	•54506		•39548	*34402	41
42	•55171		•40233	*35059	42
43	•55837		•40919	*35721	43
44	•56516		•41629	*36406	44
45	·57208	*48910	*42357	•37113	45
46	·57913	*49657	*43110	•37849	46
47	·58633	*50424	*43886	•38608	47
48	·59367	*51205	*44686	•39394	48
49	·60116	*52016	*45510	•40209	49

For explanation see p, (39).

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE NORTHAMPTON TABLE OF MORTALITY

	1				
Age	3°/。	4°/.	5 °/。	6 °/ _°	Age
50	•60866	•52827	•46338	•41036	50
51	•61604	•53621	•47157	•41851	51
52	•62339	•54424	•47976	•42666	52
53	•63086	•55239	•48819	•43509	53
54	•63843	•56069	•49681	•44375	54
55	•64612	•56919	•50562	*45264	55
56	•65391	•57778	•51462	*46175	56
57	•66180	•58656	•52386	*47115	57
58	•66980	•59550	•53329	*48077	58
59	•67790	•60460	•54291	*49062	59
60	·68610	•61385	•55276	•50075	60
61	·69438	•62324	•56281	•51111	61
62	·70275	•63278	•57305	•52175	62
63	·71136	•64264	•58371	•53285	63
64	·72005	•65265	•59457	•54423	64
65	•72899	•66302	•60591	•56617	65
66	•73802	•67353	•61743	•56840	66
67	•74712	•68420	•62919	•58085	67
68	•75629	•69500	•64114	•59364	68
69	•76550	•70587	•65329	•60666	69
70	*77473	•71685	•66557	•61985	70
71	*78395	•72785	•67791	•63326	71
72	*79310	•73883	•69029	•64674	72
73	*80212	•74971	•70262	•66015	73
74	*81094	•76037	•71476	•67345	74
75	•81943	•77067	•72648	·68631	75
76	•82742	•78038	•73757	·69853	76
77	•83538	•79010	•74871	·71082	77
78	•84352	•80008	•76024	·72355	78
79	•85212	•81070	•77257	·73730	79
80	·86073	·82139	•78500	·75128	80
81	·86895	·83163	•79700	·76475	81
82	·87682	·84147	•80857	·77777	82
83	·88401	·85049	•81919	·78983	83
84	·88950	·85737	•82729	·79900	84
85	·89456	•8637 1	•83471	-80743	85
86	·89917	•86949	•84152	-81513	86
87	·90352	•87494	•84795	-82238	87
88	·90723	•87955	•85333	-82843	88
89	·91224	•88586	•86076	-83687	89
90	•91860	·89392	•87033	·84779	90
91	•92715	·90485	•88348	•86291	91
92	•93621	·91648	•89748	·87909	92
93	•94644	·92971	•91353	·89777	93
94	•95525	·94115	•92743	•91408	94
95	•96380	•95229	-94105	•93004	95

A ge	3 %	4 %	5 %	6 %	7 %	8 %	Ag
0	·46641	.41224	*37700	35251	*33421	*32015	0
ī	*38587	*32483	28595	25974	*24079	22674	I
2	*34463	•27976	23891	21179	19258	17867	2
3	31021	.24173	19886	.17062	15097	13696	3
4	·29267	.22187	17757	.14852	12847	11430	4
5	.28079	120800	'16238	.13252	.11108	.09748	5
6	•27633	20211	.15548	12491	10387	.08904	
7	27572	20038	15286	12163	10007	.08489	7 8
9	·27764 ·28125	°20137	15305	12117	.10031	·08363 ·08430	
10	·28606		15862			10	9
II	20000	·20833	15002	·12558	10263	*08637	10
12	·29145	21789	*16695	12921	·10577	.08919	11
13	*30222	22272	17114	13640	11211	09193	13
14	.30771	.22762	17543	.14013	.11538	.09763	14
15	.31315	*23249	17967	14381	.11820	10045	15
16	.31833	•23706	18362	14715	12147	10289	16
17	°32334	.24150	.18733	15026	12408	.10211	17
18	.32841	*24590	.19110	15343	.12677	10733	18
19	•33362	'25052	.19202	15677	.12958	10970	19
20	.33901	*25532	.19919	.16058	.13259	11222	20
21	'34455	*26031	*20352	*16402	·13579	11496	21
22 23	35037	'26562	'20819	.16809	13933	.11802	22
24	·35637 ·36252	·27115 ·27690	'21310 '21824	·17240 ·17692	·14312 ·14711	·12141 ·12496	23
	·36808	.28289	*22367	17092			24
25 26	37548	28901	22307	18672	·15136	°12874 °13267	25 26
27	3/348	*29538	223500	19198	15501	13689	27
28	•38890	•30176	*24086	19725	.16529	14119	28
29	*39531	.30781	*24633	20211	16962	14504	29
30	40129	*31338	*25129	.20642	°17335	°14830	30
31	'40734	.31903	•25633	•21083	17714	.15155	31
32	'41357	*32491	.26162	21547	.18150	15504	32
33	42010	,33113	*26729	*22051	.18564	15889	33
34	°42694	33771	.27333	'22594	19049	.16319	34
35 36	43399	34457	*27967	23172	19565	.16778	35
30 37	°44117 °44870	°35170	·28633 ·29319	·23783 ·24411	°20115	17274	36
38	°45624	·36649	*30024	·25062	*20084 *21279	·17793 ·18326	37 38
39	°46393	·37416	*30752	25736	212/9	18889	39
40	*47156	38178	31477	¹26404	*22509	19444	40
41	47893	*38911	32167	27038	223085	19444	40
42	48621	•39636	*32852	·27666	.23648	·20467	42
43	49352	·40364	°33538	.28294	'24210	·2097I	43
44	.20108	*41120	*34257	.28957	.24805	*21504	44
45 46	.50885	'41905	.35010	29653	*25440	*22074	45
	.21694	42734	.35810	.30400	.26127	•22696	46
47	*52542	43607	*36662 *37586	*31204	•26873	.23378	47 48
48	53439	44542	*27 EXD	*32087	.27697	'24I4I	436

For explanation see p. (39). (280)

Age	3 %	4 %	5 %	6 %	7 %	8 %	Age
50	*55429	·46658	39714	*34164	*29679	*26022	50
51	•56509	.47824	*40905	*35347	*30831	*27126	51
52	*57598	°49003	'42124	*36558	*32015	.28267	52
53	*58699	.20211	43371	.37804	*33238	*29459	53
54	•59812	.51436	. 44648	·39089	*34507	*30696	54
55	*60948	•52694	45967	°40431	.35842	*32007	55
56	•62096 •63260	*53977	47319	'41812	'37229	'33370	56
57 58	.64413	*55286	.48710 .20102	'43243	*38668	*34800	57
59	65512	·56591 ·57833	*51433	*44687 *46062	40121	*36252	58
60			·52667		'41514	'37644	59
61	·66531 ·67436	*58987 *60007	53752	*47336	42803	*38926	60
62	.68325	61012	·54824	°48445	°43922	*40036	61
63	69222	62033	.55914	*50676	°45027	'41133	62
64	.70157	.63103	.57067	.51875	47389	°42259 °43481	63 64
65	'71112	.64203	.58262	.53126	*48664		
66	.72103	65347	.29510	*54440	*50012	°44763	65 66
67	.73122	.66539	.60824	.55832	.21421	47593	67
68	.74168	.67770	.62186	•57287	•52969	49141	68
69	.75246	•69043	.63605	•58809	*54565	.50793	69
70	•76340	.70349	.65067	.60389	.56234	.52519	70
71	.77465	.71701	•66595	.62053	*58000	·5437 I	71
72	78525	.72979	.68043	.63638	.59687	'56134	72
73	.79483	.74136	.69357	•65075	61225	·57748	73
74	*80334	.75161	.70524	•66355	.62586	.59178	74
75	.81033	.76004	.71481	·67396	•63698	.60333	75
76	.81717	•76831	.72419	.68421	64791	.61481	76
77	82352	*77597	'73291	.69377	•65805	62548	77 78
78	·82996	.78378	.74181	.40321	.66851	.63645	
79	.83713	79256	'75191	71472	•68055	°64919	79
80	*84374	*80066	.76119	'72502	69167	•66096	80
81 82	·85090 ·85734	·80950 ·81745	*77148 . *78067	.73645	.40410	.67422	81
83	·86392	·82561	79019	*74675 *75740	71529	.68615	82
84	.87027	.83352	.79948	·76781	·72693 ·73838	·69859	83 84
85	.87682	·84173	.80910	.77874			
86	88253	·8489I	·81762	·78836	.75042 .76108	*72393 *73548	85 86
87	.88719	·85477	.82452	·79628	.76978	7354° 74496	87
88	*89002	·85833	·82870	10108	.77502	75067	88
89	.89325	.86242	·83357	·8o658	.79078	.75733	89
90	.89809	·86861	.84103	.81513	•79196	.76793	90
91	.89861	•86929	·84186	.81612	.78634	•76926	91
92	*89582	·86569	.83752	.81111	. 77973	.76311	92
93	·89261	*86156	*83248	.80528	.77633	.75578	93
94	.89118	·85962	*83005	.80234	.77512	.75185	94
95	.89057	·85868	.82876	·80064	.77424	'74941	95
96	*89212	*86047	·83071	*80268	'77626	.75126	96
97 98	*89633	*86569	·83676	*80936	78352	'75904	97
99	*90132 *90880	·87184 ·88127	·84391 ·85500	·81734 ·82996	*79216	·76822	98
00	92185	·89797	·87505	·85306	·80609	·78326 ·81163	99

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

	1					1	
Age	2½ %	3 %	$3\frac{1}{2}\%$	4%	$4\frac{1}{2}\%$	5 %	Age
10	*32361	*26752	*22378	18937	•16204	*14015	10
11	*32841	*27198	*22783	19299	•16524	*14296	11
12	*33396	*27726	*23274	19750	•16937	*14670	12
13	*34012	*28320	*23836	20276	•17425	*15122	13
14	*34672	*28962	*24450	20856	•17970	*15632	14
15 16 17 18	35360 36060 36757 37433 38072	·29637 ·30326 ·31011 ·31677 ·32302	•25099 •25764 •26427 •27069 •27670	*21473 *22109 *22742 *23354 *23924	·18553 ·19156 ·19758 ·20337 ·20873	·16182 ·16752 ·17322 ·17869 ·18371	15 16 17 18
20 21 22 23 24	38671 39254 39830 40418 41030	°32886 °33451 °34011 °34584 °35183	*28226 *28763 *29294 *29839 *30413	*24447 *24950 *25446 *25957 *26499	*21361 *21827 *22287 *22761 *23267	18823 19254 19676 20113	20 21 22 23 24
25	'41668	35812	·31019	·27074	·23808	*21087	25
26	'42328	36465	·31652	·27678	·24378	*21621	26
27	'43005	37139	·32307	·28306	·24973	*22182	27
28	'43691	37824	·32975	·28947	·25583	*22758	28
29	'44385	38518	·33653	·29600	·26205	*23346	29
30	'45086	°39221	'34343	'30266	·26840	*23948	30
31	'45794	°39934	'35044	'30943	·27488	*24563	31
32	'46516	°40662	'35762	'31640	·28156	*25199	32
33	'47251	°41407	'36499	'32357	·28847	*25858	33
34	'48002	°42170	'37256	'33097	·29561	*26542	34
35	·48766	*42950	38033	33858	*30299	*27251	35
36	·49543	*43745	38828	34639	*31057	*27981	36
37	·50329	*44553	39637	35437	*31834	*28731	37
38	·51125	*45372	40461	36251	*32629	*29501	38
39	·51933	*46207	41303	37086	*33446	*30294	39
40	.52755	°47060	'42165	'37943	'34289	'31114	40
41	.53595	°47935	'43°54	'38831	'35164	'31969	41
42	.54457	°48836	'43974	'39752	'36076	'32863	42
43	.55340	°49762	'44921	'40706	'37023	'33796	43
44	.56236	°50707	'45892	'41685	'37999	'34760	44
45	*57147	•51669	·46884	'42690	*39004	'35755	45
46	*58064	•52642	·47889	'43712	*40028	'36772	46
47	*58985	•53621	·48904	'44745	*41067	'37806	47
48	*59910	•54608	·49930	'45792	*42122	'38858	48
49	*60842	•55605	·50970	'46856	*43197	'39934	49
50	·61782	•56613	•52023	·47938	'44293	'41033	50
51	·62732	•57635	•53096	·49043	'45416	'42162	51
52	·63695	•58676	•54191	·50174	'46569	'43326	52
53	·64667	•59729	•55303	·51327	'47748	'44518	53
54	·65645	•60792	•56428	·52496	'48947	'45735	54

For explanation see p. (39).

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	2½ %	3 %	3½ %	4 %	41/2%	5 %	Age
55	·66627	*61863	·57566	*53682	·50166	*46975	55
56	·67612	*62939	·58712	*54881	·51401	*48235	56
57	·68597	*64020	·59866	*56090	·52651	*49513	57
58	·69583	*65103	·61026	*57309	·53915	*50809	58
59	·70568	*66190	·62193	*58539	·55193	*52122	59
60	71548	·67274	.63361	*59773	·56478	·53446	60
61	72522	·68353	.64526	*61007	·57766	·54777	61
62	73485	·69424	.65685	*62237	·59053	·56109	62
63	74437	·70484	.66835	*63461	·60337	·57441	63
64	75375	·71532	.67974	*64675	·61613	·58767	64
65	76302	'72569	°69104	·65883	·62886	·60092	65
66	77220	'73600	°70230	·67089	·64159	·61421	66
67	78132	'74626	°71354	·68297	·65437	·62758	67
68	79039	'75650	°72478	·69507	·66721	·64105	68
69	79948	'76678	°73610	·70729	·68021	·65473	69
70	·80849	.77700	74738	71950	·69323	·66845	70
71	·81734	.78706	75852	73159	·70615	·68210	71
72	·82593	.79685	76937	74339	·71879	·69549	72
73	·83415	.80623	77980	75475	·73098	·70841	73
74	·84190	.81510	78967	76551	·74254	·72069	74
75	·84919	·82345	.79897	77567	75347	.73231	75
76	·85628	·83159	.80806	78561	76418	.74372	76
77	·86313	·83946	.81686	79525	77459	.75482	77
78	·86978	·84711	.82543	80466	78476	.76569	78
79	·87628	·85461	.83384	81392	79479	.77643	79
80	·88256	·86187	·84200	·82291	*80455	·78690	80
81	·88850	·86874	·84974	·83145	*81383	·79686	81
82	·89394	·87506	·85686	·83931	*82238	·80605	82
83	·89899	·88090	·86345	·84659	*83031	·81458	83
84	·90353	·88617	·86940	·85317	*83747	·82228	84
85 86 87 88 89	•90778 •91200 •91645 •92113 •92659	·89110 ·89601 ·90118 ·90663	·87496 ·88050 ·88635 ·89252 ·89977	·85932 ·86545 ·87194 ·87878 ·88686	*84416 *85084 *85792 *86541 *87427	·82948 ·83667 ·84430 ·85239 ·86198	85 86 87 88 89
90	.93272	°92020	*90796	·89600	*88432	·87290	90
91	.93899	°92756	*91637	·90541	*89468	·88417	91
92	.94538	°93508	*92498	·91507	*90534	·89579	92
93	.95224	°94317	*93426	·92549	*91687	·90840	93
94	.95899	°95116	*94344	·93583	*92834	·92096	94
95	·96542	•95878	*95222	*94575	*93934	°933°4	95
96	·97124	•96568	*96018	*95475	*94933	°944°5	96
97	·97561	•9708 7	*96618	*96154	*95694	°95238	97

SINGLE PAYMENT TO SECURE £1 AT DEATH ACCORDING TO THE BRITISH OFFICES TABLE

Age	$2rac{1}{2}$ °/ $_{\circ}$	3 °/ _°	3½ °/。	4 °/。	5 °/。	6 °/。	Age
10	*30845	·25234	•20891	•17500	·1271	*0964	10
11	*31383	•25740	•21356	•17923	·1305	*0991	11
12	*31937	·26261	•21837	•18361	·1341	*1020	12
13	*32502	·26796	•22333	•18815	·1378	*1050	13
14	*33080	·27346	•22845	•19285	·1417	*1082	14
15	•33673	·27911	•23373	•19773	·1458	•1116	15
16	•34278	·28491	•23918	•20277	·1500	•1151	16
17	•34896	·29086	•24478	•20798	·1544	•1187	17
18	•35526	·29695	•25054	•21334	·1590	•1226	18
19	•36170	·30319	•25646	•21889	·1637	•1266	19
20	•36826	·30958	•26254	•22461	•1686	•1308	20
21	•37496	·31610	•26877	•23047	•1737	•1351	21
22	•38174	·32275	•27516	•23652	•1790	•1396	22
23	•38866	·32956	•28170	•24272	•1844	•1443	23
24	•39569	·33648	•28838	•24907	•1900	•1492	24
25	*40280	*34353	·29522	•25559	·1958	•1542	25
26	*41003	*35072	·30219	•26226	·2018	•1594	26
27	*41737	*35802	·30931	•26910	·2079	•1648	27
28	*42481	*36545	·31656	•27608	·2142	•1704	28
29	*43232	*37300	·32397	•28322	·2206	•1761	29
30	*43995	•38066	•33150	•29051	·2273	•1820	30
31	*44766	•38845	•33917	•29795	·2341	•1881	31
32	*45547	•39636	•34698	•30556	·2411	•1944	32
33	*46338	•40438	•35495	•31334	·2483	•2009	33
34	*47139	•41253	•36306	•32127	·2556	•2076	34
35	*47950	*42083	·37133	•32939	·2632	•2145	35
36	*48770	*42923	·37974	•33767	·2710	•2216	36
37	*49602	*43778	·38832	•34614	·2790	•2290	37
38	*50443	*44646	·39705	•35480	·2872	•2366	38
39	*51296	*45529	·40598	•36366	·2957	•2444	39
40	·52159	•46425	•41506	•37270	·3043	•2525	40
41	·53032	•47336	•42433	•38195	·3133	•2609	41
42	·53918	•48261	•43375	•39141	·3225	•2696	42
43	·54813	•49201	•44335	•40106	·3319	•2786	43
44	·55719	•50153	•45315	•41093	·3416	•2878	44
45	•56636	•51122	·46311	•42101	*3515	·2973	45
46	•57563	•52103	·47325	•43129	*3617	·3072	46
47	•58498	•53097	·48354	•44176	*3722	·3174	47
48	•59442	•54104	·49400	•45246	*3830	·3278	48
49	•60396	•55123	·50464	•46333	*3939	·3386	49
50	·61356	•56154	•51541	*47439	*4052	*3497	50
51	·62323	•57194	•52632	*48562	*4167	*3610	51
52	·63297	•58244	•53735	*49704	*4284	*3727	52
53	·64275	•59302	•54852	*50859	*4403	*3846	53
54	·65254	•60368	•55980	*52032	*4525	*3969	54

For explanation see p. (39).

	SINGLE P.		ro securi E british			CCORDING	
Age	2½°/。	3 °/。	3½ °/。	4 °/。	5 °/ _°	6 °/。	Age
55	•66240	•61440	•57116	•53216	•4649	*4094	55
56	•67226	•62516	•58263	•54411	•4774	*4221	56
57	•68212	•63596	•59416	•55619	•490 I	*4351	57
58	•69197	•64679	•60573	•56834	•5030	*4483	58
59	•70179	•65761	•61733	•58056	•5161	*4617	59
60	•71159	•66844	•62897	•59284	•5292	*4753	60
61	•72134	•67922	•64062	•60515	•5425	*4891	61
62	•73100	•68999	•65223	•61749	•5558	*5030	62
63	•74061	•70066	•66383	•62981	•5692	*5170	63
64	•75012	•71128	•67537	•64210	•5826	*5312	64
65	*75954	•72181	•68683	·65436	•5960	*5453	65
66	*76881	•73223	•69820	·66653	•6095	*5596	66
67	*77798	•74252	•70948	·67863	•6228	*5739	67
68	*78699	•75270	•72063	·69061	•6362	*5881	68
69	*79585	•76269	•73163	·70247	•6494	*6024	69
70	*80453	•77252	·74245	·71418	·6625	•6165	70
71	*81306	•78219	·75313	·72572	·6755	•6306	71
72	*82137	•79164	·76357	·73707	·6883	•6445	72
73	*82949	•80088	·77384	·74824	·7009	•6583	73
74	*83738	•80992	·78386	·75915	·7134	•6719	74
75	•84508	·81873	•79365	•76984	·7256	·6853	75
76	•85255	·82729	•80321	•78028	·7375	·6985	76
77	•85979	·83558	•81249	•79044	·7492	·7115	77
78	•86678	·84363	•82152	•80033	·7606	·7241	78
79	•87353	·85141	•83023	•80993	·7717	·7365	79
80	•88004	·85893	·83869	·81922	·7825	·7486	80
81	•88630	·86618	·84682	·82819	·7930	·7603	81
82	•89230	·87315	·85465	·83685	·8031	·7716	82
83	•89807	·87981	·86220	·84518	·8129	·7827	83
84	•90355	·88622	·86942	·85318	·8223	·7933	84

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ANNUAL PAYMENT DURING LIFE TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

		1	1	1	4		
Age	2½%	3 %	$3\frac{1}{2}\%$	4%	4½ %	5 %	Age
10	*01167	*01064	*00975	.00899	*00833	*00776	10
11	*01193	*01088	*00998	.00920	*00852	*00794	11
12	*01233	*01117	*01026	.00947	*00878	*00819	12
13	*01257	*01151	*01058	.00978	*00909	*00848	13
14	*01295	*01188	*01094	.01014	*00943	*00882	14
15 16 17 18 19	*01334 *01376 *01418 *01459 *01499	*01227 *01268 *01309 *01350 *01390	*01133 *01174 *01215 *01255 *01294	*01052 *01092 *01132 *01172 *01210	.00981 .01020 .01060 .01099 .01136	*00919 *00958 *00998 *01036 *01072	15 16 17 18
20	°01538	*01427	°01330	·01245	.01170	*01104	20
21	°01576	*01464	°01365	·01279	.01202	*01135	21
22	°01615	*01501	°01401	·01313	.01235	*01166	22
23	°01655	*01540	°01438	·01348	.01269	*01199	23
24	°01697	*01581	°01478	·01387	.01306	*01234	24
25	'01742	*01625	*01521	•01428	.01346	*01272	25
26	'01790	*01672	*01566	•01472	.01388	*01314	26
27	'01840	*01721	*01614	•01519	.01433	*01357	27
28	'01893	*01772	*01664	•01567	.01480	*01403	28
29	'01947	*01825	*01715	•01617	.01529	*01450	29
30	'02003	°01880	*01769	•01669	·01580	·01499	30
31	'02061	°01936	*01824	•01723	·01632	·01550	31
32	'02121	°01996	*01883	•01780	·01688	·01604	32
33	'02185	°02058	*01944	•01840	·01746	·01661	33
34	'02252	°02124	*02008	•01903	·01807	·01721	34
35	°02322	°02193	'02076	*01969	*01872	·01784	35
36	°02395	°02265	'02146	*02038	*01940	·01850	36
37	°02471	°02340	'02221	*02111	*02011	·01920	37
38	°02551	°02419	'02298	*02187	*02086	·01993	38
39	°02635	°02502	'02380	*02267	*02164	·02069	39
40	'02723	*02589	°02465	°02352	·02247	*02151	40
41	'02817	*02682	°02557	°02442	·02336	*02238	41
42	'02917	*02780	°02654	°02538	·02430	*02331	42
43	'03022	*02885	°02758	°02640	·02532	*02431	43
44	'03134	*02996	°02868	°02749	·02639	*02537	44
45	°03253	'03114	'02985	·02865	·02754	•02650	45
46	°03377	'03238	'03108	·02987	·02874	•02769	46
47	°03508	'03367	'03237	·03115	·03001	•02895	47
48	°03645	'03504	'03372	·03249	·03134	•03026	48
49	°03790	'03648	'03515	·03391	·03275	•03166	49
50	*03943	*03801	*03667	.03542	.03424	°03314	50
51	*04106	*03963	*03828	.03702	.03583	°03471	51
52	*04279	*04136	*04000	.03873	.03753	°03640	52
53	*04464	*04320	*04184	.04056	.03935	°03821	53
54	*04661	*04516	*04379	.04250	.04129	°04013	54

For explanation see p. (39).

ANNUAL PAYMENT DURING LIFE TO SECURE £1 AT DEATH ACCORDING TO THE INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Age	212%	3 %	$3\frac{1}{2}\%$	4 %	41/2%	5 %	Age
55	.04870	·04725	*04588	*04458	°04335	*04219	55
56	.05092	·04946	*04809	*04678	°04555	*04437	56
57	.05328	·05182	*05044	*04913	°04788	*04670	57
58	.05580	·05434	*05295	*05163	°05038	*04918	58
59	.05848	·05702	*05563	*05431	°05304	*05184	59
60	.06134	•05987	•05848	°05715	.05588	*05467	60
61	.06437	•06291	•06151	°06018	.05890	*05768	61
62	.06760	•06613	•06473	°06339	.06211	*06087	62
63	.07102	•06956	•06815	°06680	.06551	*06427	63
64	.07466	•07319	•07177	°07042	.06912	*06787	64
65	*07853	•07705	•07564	*07427	·07296	*07170	65
66	*08268	•08120	•07978	*07841	·07709	*07581	66
67	*08714	•08566	•08423	*08286	·08153	*08025	67
68	*09197	•09049	•08906	*08767	·08634	*08504	68
69	*09725	•09576	•09433	*09294	·09160	*09030	69
70	·10297	·10148	*10005	*09866	·09731	*09601	70
71	·10914	·10766	*10622	*10483	·10348	*10218	71
72	·11572	·11425	*11281	*11142	·11007	*11876	72
73	·12267	·12119	*11976	*11836	·11701	*11569	73
74	·12988	·12840	*12696	*12556	·12420	*12287	74
75	13734	·13585	13440	13299	·13161	13027	75
76	14532	·14382	14236	14094	·13954	13819	76
77	15382	·15230	15083	14939	·14798	14660	77
78	16291	·16138	15989	15843	·15701	15561	78
79	17275	·17121	16970	16823	·16679	16538	79
80	18329	•18174	18022	·17873	·17727	*17584	80
81	19435	•19277	19123	·18972	·18824	*18679	81
82	20559	•20399	20242	·20089	·19938	*19790	82
83	21707	•21543	21383	·21225	·21071	*20920	83
84	22844	•22676	22510	·22348	·22189	*22032	84
85	·24009	•23834	•23662	·23493	*23327	*23163	85
86	·25279	•25096	•24916	·24739	*24565	*24393	86
87	·26755	•26563	•26373	·26187	*26003	*25823	87
88	·28485	•28282	•28081	·27884	*27689	*27498	88
89	·30786	•30570	•30358	·30149	*29943	*29740	89
90	•33813	*33585	*33360	•33138	*32919	°32703	90
91	•37537	*37294	*37053	•36816	*36582	°36351	91
92	•42217	*41954	*41694	•41438	*41185	°40935	92
93	•48624	*48338	*48055	•47776	*47499	°47226	93
94	•57035	*56719	*56405	•56095	*55789	°55486	94
95	·68105	•67748	·67394	·67044	·66696	·66354	95
96	·82364	•81954	·81546	·81144	·80742	·80350	96
97	·97561	•97087	·96618	·96154	·95694	·95238	97

ANNUAL PAYMENT DURING LIFE TO SECURE £1 AT DEATH ACCORDING TO THE BRITISH OFFICES TABLE

Age	2½°/。	3 °/.	3½°/。	4 °/。	5 °/ _°	6 °/ _°	Age
10	•01088	•00983	•00893	•00816	•0069	•0060	10
11			•00093	.00840	*007I	•0062	11
	.01116	.01010		•00865	.0074	•0064	12
12	.01144	.01037	•00945	_ ~		•0066	13
13	.01174	•01066	.00972	.00891	•0076		
14	•01206	•01096	.0100I	•00919	•0079	•0069	14
15	·01238	·01128	.01032	.00948	1800•	·007I	15
16	·01272	·01160	•01063	· o o978	•0084	·0074	16
17	·01307	.01195	•01096	.01010	•0087	·0076	17
18	.01344	·01230	•01130	.01043	•0090	•0079	18
19	·01382	·01267	•01166	.01078	•0093	•0082	19
20	·01422	•01306	·01204	.01114	•0097	•0085	20
21	.01463	•01346	·01243	.01152	.0100	•0088	21
22	·01506	·01388	.01284	.01101	•0104	*0092	22
23	·01551	·01432	•01326	.01233	·0108	•0095	23
24		·01432	•01370	·01276	.0113	•0099	24
23	•01597	014//		·			
25	.01645	•01524	.01416	.01321	.0119	.0103	25
26	·01695	·01573	•01464	·01367	*0120	.0107	26
27	·01747	.01624	.01514	·01416	.0125	.0112	27
28	.01801	·01677	·01566	.01467	.0130	.0119	28
29	·01858	.01733	•01620	·01520	.0135	·0121	29
20	01050	01/33					00
30	•01916	•01790	•01677	·01575	·0140	·0126	30
31	.01977	·01850	.01736	•01632	.0145	.0131	31
32	.02040	.01912	.01797	•01692	.0121	·0137	32
33	.02106	•01977	•01861	.01755	.0157	.0142	33
34	.02175	•02045	•01928	·01821	.0163	·0148	34
35	.02247	•02116	•01997	·01889	•0170	•0155	35
36	*02322	.02190	•02070	•0196í	.0177	•0161	36
37	•02400	•02268	.02147	•02036	0184	·0168	37
38		*02349	*02227	.02115	*0192	*0175	38
	•02483	0 11	·02227	•02198	*0200	.0183	39
39	•02569	•02434	02311	02190	0200	0.03	
40	•02659	.02524	·02400	•02285	•0208	•0191	40 41
41	.02754	·02618	•02492	•02377	.0217	·0200	
42	.02854	.02717	.02590	.02474	.0227	*0209	42
43	•02959	.02821	.02693	.02575	•0236	•0219	43
44	•03069	•02931	•02802	•02683	•0247	*0229	44
45	•03185	•03046	•02917	.02797	·0258	•0240	45
46	•03308	•03168	•03038	.02917	.0270	·0251	46
47	.03438	•03297	.03166	·03044	•0282	•0263	47
48	.03575	°03434	•03302	·03178	·0295	•0276	48
49	•03720	•03578	•03445	.03321	.0309	*0290	49
50	•03873	•03730	•03597	•03471	•0324	•0304	50
51	•04035	·03892	•03757	.03631	•0340	•0320	51
52		•04063	103928	.03801	•0357	•0336	52
	•04206		*04109	•03981	•0375	•0354	53
53 54	•04388	*04244		*04172	•0394	.0372	54
	.04581	*04437	•04300	041/2	2374	-31-	

For explanation see p. (39).

ANNUAL PAYMENT DURING LIFE TO SECURE £1 AT DEATH ACCORDING TO THE BRITISH OFFICES TABLE

1	ACCORDING TO THE BRITISH OFFICES TABLE								
Age	2½°/。	3 °/。	$3\frac{1}{2}$ $^{\circ}/_{\circ}$	4 °/ _°	5 °/ _°	6 °/。	Age		
55	·04786	•04641	·04504	*04375	.0414	*0392	55		
56	·05003	•04858	·04721	*04590	.0435	*0413	56		
57	·05234	•05088	·04951	*04820	.0458	*0436	57		
58	·05479	•05334	·05195	*05064	.0482	*0460	58		
59	·05740	•05594	·05456	*05324	.0508	*0485	59		
60	•06018	·05872	·05733	•05600	.0535	.0513	60		
61	•06313	·06167	·06028	•05895	.0565	.0542	61		
62	•06628	·06482	·06342	•06209	.0596	.0573	62		
63	•06964	·06818	·06678	•06543	.0629	.0606	63		
64	•07322	·07175	·07035	•06900	.0665	.0641	64		
65	·07704	•07557	·07416	•07281	•0703	•0679	65		
66	·08112	•07965	·07823	•07688	•0743	•0719	66		
67	·08547	•08400	·08258	•08122	•0786	•0762	67		
68	·09012	•08864	·08722	•08585	•0833	•0808	68		
69	·09508	•09361	·09218	•09081	•0882	•0857	69		
70	·10039	·09892	**09749	·09610	·0935	•0910	70		
71	·10607	·10459	**10316	·10177	·0991	•0966	71		
72	·11215	·11066	**10922	·10782	·1051	•1026	72		
73	·11865	·11716	**11571	·11430	·1116	•1091	73		
74	·12560	·12410	**12264	·12123	·1185	•1159	74		
75	·13305	·13154	·13007	·12864	·1259	•1233	75		
76	·14103	·13951	·13803	·13658	·1338	•1312	76		
77	·14956	·14802	·14653	·14507	·1423	•1396	77		
78	·15869	·15714	·15564	·15416	·1513	•1486	78		
79	·16847	·16691	·16538	·16389	·1610	•1582	79		
80	•17892	·17735	·17580	·17428	•1713	·1685	80		
81	•19012	·18852	·18695	·18540	•1824	·1795	81		
82	•20208	·20045	·19885	·19728	•1942	·1913	82		
83	•21486	·21320	·21157	·20997	•2068	·2038	83		
84	•22851	·22682	·22515	·22351	•2203	·2172	84		
85	·24306	·24134	•23963	·23796	·2347	•2315	85		
86	·25854	·25677	•25502	·25331	·2499	•2467	86		
87	·27504	·27322	•27143	·26967	·2662	•2629	87		
88	·29252	·29066	•28880	·28699	·2834	•2800	88		
89	·31106	·30914	•30723	·30535	·3017	•2981	89		
90	·33077	·32879	•32682	·32488	·3211	*3174	90		
91	·35136	·34929	•34727	·34525	·3413	*3374	91		
92	·37342	·37129	•36918	·36709	·3630	*3590	92		
93	·39590	·39369	•39149	·38931	·3850	*3809	93		
94	·42039	·41807	•41579	·41352	·4091	*4048	94		
95	·44452	•44211	*43973	·43738	·4328	•4282	95		
96	·47115	•46864	*46615	·46368	·4589	•4541	96		
97	·49512	•49246	*48987	·48726	·4822	•4772	97		
98	·52117	•51838	*51562	·51286	·5074	•5021	98		
99	·56123	•55826	*55533	·55231	·5464	•5407	99		
100	·61901	·61580	·61262	·60935	·6027	•5964	100		
101	·73013	·72632	·72312	·71884	·7114	•7045	101		
102	·97561	•97087	·96618	·96154	·9524	•9435	102		

PRESENT VALUE OF REVERSION TO A PERPETUITY AT DEATH OF A PERSON OF AGE STATED. GOVERNMENT EXPERIENCE, 1883

MALES

			MALES			
Age	2½ %	3 %	$3\frac{1}{2}\%$	4 %	5 %	Age
20 25 30 35 40	17·566 18·718 19·921 21·178 22·499	12·772 13·732 14·745 15·818 16·957	9.635 10.441 11.300 12.218 13.206	 10·546	 7.117	20 25 30 35 40
41	22.773	17·195	13.413	10.727	7·257	41
42	23.050	17·436	13.624	10.912	7·401	42
43	23.330	17·680	13.838	11.101	7·549	43
44	23.613	17·929	14.057	11.293	7·700	44
45	23.901	18·181	14.279	11.490	7·855	45
46	24·193	18·438	14·506	11.691	8.014	46
47	24·489	18·700	14·738	11.897	8.178	47
48	24·791	18·967	14·976	12.109	8.347	48
49	25·100	19·242	15·220	12.327	8.523	49
50	25·412	19·520	15·468	12.550	8.702	50
51	25.732	19.807	15.726	12·781	8·890	51
52	26.059	20.100	15.989	13·018	9·084	52
53	26.392	20.400	16.260	13·263	9·286	53
54	26.733	20.708	16.539	13·516	9·494	54
55	27.081	21.024	16.825	13·776	9·711	55
56	27.437	21.347	17·120	14.045	9.937	56
57	27.802	21.680	17·425	14.324	10.172	57
58	28.177	22.023	17·739	14.613	10.417	58
59	28.561	22.377	18·065	14.914	10.674	59
60	28.946	22.732	18·393	15.217	10.935	60
61 62 63 64 65	29.322 29.686 30.052 30.414 30.775	23.079 23.417 23.756 24.094 24.431	18.714 19.028 19.343 19.658 19.974	15.806 16.100 16.395 16.691	11·192 11·444 11·700 11·959	61 62 63 64 65
66	31·125	24.760	20·282	16·980	12·475	66
67	31·467	25.081	20·584	17·264	12·727	67
68	31·804	25.397	20·882	17·545	12·977	68
69	32·142	25.716	21·183	17·829	13·232	69
70	32·479	26.034	21·484	18·114	13·488	70
71	32·809	26·347	21.781	18·396	13.743	71
72	33·136	26·658	22.076	18·677	13.997	72
73	33·454	26·960	22.363	18·950	14.246	73
74	33·755	27·247	22.637	19·212	14.485	74
75	34·045	27·524	22.902	19·465	14.717	75
76	34·328	27·795	23·161	19.714	14·946	76
77	34·596	28·052	23·408	19.950	15·164	77
78	34·855	28·300	23·646	20.179	15·376	78
79	35·109	28·545	23·882	20.406	15·587	79
80	35·353	28·780	24·108	20.624	15·790	80

For explanation see p. (40).

PRESENT VALUE OF REVERSION TO A PERPETUITY AT DEATH OF A PERSON OF AGE STATED. GOVERNMENT EXPERIENCE, 1883

FEMALES			

			FEMALES			
Age	2½ %	3 %	3½ %	4 %	5 %	Age
20 25 30 35 40	15·521 16·603 17·777 19·061 20·477	11.041 11.918 12.882 13.953 15.153	8·162 8·876 9·673 10·570 11·591	9·096 	 5.937	20 25 30 35 40
41	20.777	15.411	11.813	9°288	6.080	41
42	21.085	15.676	12.042	9°486	6.231	42
43	21.399	15.947	12.277	9°690	6.387	43
44	21.721	16.226	12.520	9°902	6.549	44
45	22.050	16.513	12.770	10°121	6.719	45
46	22·388	16·808	13.028	10·348	6.895	46
47	22·734	17·112	13.295	10·584	7.080	47
48	23·089	17·423	13.571	10·827	7.273	48
49	23·448	17·741	13.852	11·077	7.472	49
50	23·810	18·063	14.137	11·331	7.675	50
51	24·169	18·382	14.422	11.585	7.879	51
52	24·535	18·707	14.712	11.845	8.089	52
53	24·909	19·041	15.013	12.115	8.308	53
54	25·288	19·382	15.319	12.391	8.533	54
55	25·671	19·726	15.629	12.672	8.764	55
56	26.064	20.081	15·951	12·964	9.006	56
57	26.462	20.443	16·279	13·262	9.255	57
58	26.862	20.806	16·611	13·565	9.508	58
59	27.265	21.173	16·946	13·872	9.767	59
60	27.667	21.542	17·284	14·182	10.029	60
61	28·075	21.916	17·628	14.500	10·300	61
62	28·477	22.287	17·970	14.815	10·571	62
63	28·880	22.659	18·314	15.134	10·845	63
64	29·287	23.036	18·664	15.459	11·127	64
65	29·704	23.424	19·025	15.796	11·421	65
66	30·120	23.812	19·388	16·135	11.718	66
67	30·537	24.202	19·753	16·477	12.020	67
68	30·948	24.588	20·115	16·818	12.322	68
69	31·350	24.966	20·471	17·153	12.621	69
70	31·740	25.333	20·817	17·480	12.913	70
71	32·107	25.679	21.145	17.790	13.191	71
72	32·461	26.014	21.461	18.090	13.461	72
73	32·804	26.339	21.770	18.383	13.726	73
74	33·137	26.655	22.071	18.669	13.986	74
75	33·463	26.967	22.367	18.952	14.243	75
76	33.780	27·269	22.656	19·227	14·496	76
77	34.089	27·564	22.938	19·498	14·744	77
78	34.387	27·850	23.212	19·760	14·985	78
79	34.677	28·128	23.479	20·017	15·223	79
80	34.956	28·396	23.737	20·265	15·453	80

Present Value of Reversion to a Perpetuity at Death of a Person of Age stated.

NORTHAMPTON TABLE

Age	3 %	4 %	5 %	6 %	Age
5	12·860	7·752	5·173	3.705	5
10	12·670	7·477	4·861	3.382	10
15	13·676	8·209	5·412	3.810	15
20	14·695	8·967	5·993	4.269	20
25	15·519	9·562	6·433	4.604	25
30	16·411	10·219	6·928	4.985	30
35	17·395	10·961	7·498	5.431	35
40	18·485	11·803	8·163	5.962	40
45	19·641	12·717	8·895	6.557	45
50	20·897	13·736	9·731	7.250	50
55	22·183	14.799	10·618	7.997	55
60	23·556	15.961	11·608	8.847	60
65	25·029	17.239	12·724	9.826	65
70	26·599	18.639	13·977	10.951	70
75	28·134	20.038	15·256	12.125	75
80	29.552	21°357	16·485	13·273	80
85	30.713	22°457	17·529	14·265	85
90	31.539	23°242	18·277	14·978	90
95	33.091	24°760	19·762	16·431	95

CARLISLE TABLE

Age	3 %	4 %	5 %	6 %	Age
5	9.640	5.406	3.410	2·342	5
10	9.821	5.415	3.331	2·219	10
15	10.751	6.044	3.773	2·541	15
20	11.639	6.637	4.183	2·832	20
25	12.668	7.355	4.697	3·211	25
30	13·777	8·148	5°277	3.647	30
35	14·900	8·959	5°873	4.094	35
40	16·190	9·926	6°610	4.665	40
45	17·470	10·896	7°352	5.239	45
50	19·030	12·131	8°340	6.036	50
55 60 65 70 75	20·925 22·842 24·416 26·210 27·821	13·700 15·337 16·693 18·291 19·761	9.653 11.060 12.235 13.664 15.011	7°143 8°363 9°386 10°669	55 60 65 70 75
80	28·968	20·817	15°985	12·809	80
85	30·104	21·885	16°991	13·758	85
90	30·834	22·584	17°661	14·401	90
95	30·576	22·326	17°404	14·145	95

For explanation see p. (40).

TABLES

COMBINING

MORTALITY OF TWO AND THREE LIVES

AND

INTEREST

PREMIUM CONVERSION TABLES

Value of an Annuity for the Joint Continuance of Two Lives according to the NORTHAMPTON TABLE

		4 - ()	- 1		0 0 /	44/	F 0.
Ages	3 %	4 %	5 %	Ages	3 %	4 %	5 %
15 15	15.220	13.411	11.964	35 45	10.622	9.706	8.921
15 20	14.660	12.961	11.282	35 50	9.912	9.110	8.415
15 25	14.530	12.630	11.324	35 55	9,131	8.448	7.849
15 30	13.734	12.246	11.051	35 60	8.227	7.669	7.174
15 35	13.121	11.787	10.655	35 65	7.177	6.747	6.360
15 40	12.459	11.534	10.502	35 70	5.971	5.663	5.382
15 45	11.687	10.607	9.690	35 75	4.720	4.216	4.327
15 50	10.799	9.872	9.076	35 80	3.206	3.383	3.268
15 55	9·851 8·790	9.077 8.170	8·403 7·622	40 40	10.764	9·820 9·381	9.016 8.643
15 60			· .	40 45			
15 65	7:597	7.127	6.705	40 50	9·590 9·870	8·834 8·221	8·177 7·651
15 70	6.264 4.011	5.933 4.695	5.631	40 55 40 60	8.025	7.490	7.015
15 75 15 80	3.621	3.492	4.495 3.372	7-	7.030	6.614	6.240
20 20	14.133	12.232	11.535	40 05	5.871	5.21	5.298
20 25	13.741	12,333	10.080	40 75	4.656	4.457	4.272
20 25	13.586	11.873	10 909	40 75	3.469	3.340	3.236
20 35	12.744	11'445	10.363	45 45	9.776	8.990	8.312
20 40	12.096	10.924	9.937	45 50	9.204	8.503	7.891
20 45	11.367	10.330	9.448	45 55	8.557	7.948	7.411
20 50	10.23	9.630	8.861	45 60	7.781	7.274	6.822
20 55	9.617	8.869	8.216	45 65	6.850	6.453	6.094
20 60	8.597	7.995	7.463	45 70	5.749	5°460	5.195
20 65	7.444	6.986	6.576	45 75	4.280	4.386	4.206
20 70	6.149	5.826	5.233	45 80	3.426	3.308	3.192
20 75	4.831	4.619	4.424	50 50	8.714	8.081	7.522
20 80	3.269	3'443	3.322	50 55	8.125	7.593	7.098
25 25	13.383	11.944	10.764	50 60	7.461	6.989	6.568
25 30	12.966	11.618	10.499	50 65	6.611	6.236	5.897
25 35	12.463	11.517	10.172	50 70	5.282	5.306	5.054
25 40	11.854	10.725	9.771	50 75	4.472	4.285	4'112
25 45	11.164	9.488	9·304 8·739	50 80	3·362 7·681	3.544	3·140 6·735
25 50	9.484	8.754	8.116	55 55 55 60	7.088	7·179 6·659	6.272
25 55 25 60	8.495	7.906	7.383	55 65 55 65	6.334	5.986	5.671
25 65	7:370	6.920	6.515	55 70	5.391	5.135	4.893
25 70	6.099	5.780	5.489	55 75	4.320	4.121	4.006
25 75	4.799	4.589	4.396	55 80	3.591	3.180	3.076
25 80	3.550	3.425	3.308	60 60	6.606	6.226	5.888
30 30	12.289	11.313	10.255	60 65	5.970	5.658	5.372
30 35	12.131	10.948	9.954	60 70	5.139	4.900	4.280
30 40	11.268	10.490	9.576	60 75	4.189	4.021	3.866
30 45	10.923	9.959	9.135	60 80	3.192	3.092	2.992
30 50	10.190	9.321	8.596	65 65	5.471	5.201	4.960
30 55	9.329	8.619	7.999	65 70	4.783	4.573	4.378
30 60	8.378	7.802	7.292	65 75	3.958	3.806	3.665
30 65	7.286	6.844	6.447	65 80	3.063	2.965	2.873
30 70	6.043 4.764	5.729	5.442	70 70	4.261	4.087	3.930
30 75 30 80	3.230	3°406	3.290	70 75 70 80	3.599 2.843	3.471 2.757	3°347 2°675
35 35	11.722	10.612	9.680	75 75	3.114	3.012	2.017
35 40	11.513	10.109	9.331	75 75 75 80	2.526	2.448	2.381
33 73		1 , 0	7 33*	75 05	1 - 3-0	- 77	1 3-1

For explanation see pp. (41-43).

Value of a	n Annuity for the	he Joint Co he CARLI			Lives accor	ding to
Ages 3	% Ages	3 %	Ages	3 %	Ages	3 %
5 5 15 19 19 19 15 15 15 15 15 16 16 16 16 17 16 17 17 16 18 18 18 18 18 18 18 18 18 18 18 18 18	15 15 85 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90 15 15 90	3:149 2:441 2:669 1:663 17:992 17:420 16:748 16:031 15:131 14:207 12:995 f1:428 9:782 8:411 6:790 5:298 4:225 3:143 2:437 2:696 1:661 16:915 16:311 15:660 14:823 13:954 12:793 11:274 9:668 8:329 6:736 5:263 4:203 3:130 2:428 2:688 1:660 15:783 15:209 14:449 13:649 12:551 11:089 9:529 8:224 6:662 5:213 4:168 3:107 2:471 2:670	35 40 35 45 35 55 35 55 35 55 35 35 77 35 35 85 35 35 100 40 45 40 50 50 65 40 40 40 40 40 55 45 45 55 45 45 50 5	14.048 13.331 12.313 10.919 9.410 8.140 6.608 5.179 4.148 3.095 2.403 2.663 1.650 13.482 12.869 11.955 10.658 9.224 8.006 6.515 5.115 4.102 3.065 2.380 2.639 1.641 12.371 11.580 10.400 9.063 7.910 6.465 5.089 4.087 3.056 2.375 2.633 1.637 10.942 9.924 8.729 7.691 6.338 5.022 4.054 3.040 2.365 2.629 1.639 9.103 8.098	55 70 55 75 55 80 55 85 55 90 60 60 60 70 60 75 60 80 60 95 60 90 60 95 65 75 65 80 65 95 65 100 70 75 70 80 70 70 80 70 90 70 95 70 100 75 85 75 95 75 90 80 90 90 90 90 90 90 9	6:019 4:813 3:920 2:961 2:307 2:575 1:625 7:295 6:589 5:565 4:497 3:695 2:812 2:199 2:458 1:577 6:047 5:193 4:256 3:542 2:719 2:131 2:398 1:555 3:804 3:228 2:522 1:987 2:248 1:513 3:231 2:790 2:217 1:758 1:993 1:392 2:459 1:967 1:366 1:366 1:657 1:335 1:509 1:170 1:088 1:217 -977 1:088 1:217

For explanation see pp. (41-43).

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883

	TWO M	IALES			TWO FE	MALES	
Ages	$2\frac{1}{2}\%$	3 %	3½ %	Ages	$2\frac{1}{2}\%$	3 %	3½%
20 20 20 25 20 30 20 35 20 40	17.438 16.847 16.186 15.445 14.617	16·239 15·726 15·151 14·505 13·778	15.174 14.727 14.224 13.658	20 20 20 25 20 30 20 35 20 40	19·906 19·348 18·675 17·867 16·905	18·384 17·915 17·347 16·661 15·835	17.047 16.651 16.169 15.584 14.872
20 45	13.687	12.957	12·289	20 45	15.760	14.837	14.000
20 50	12.632	12.014	11·444	20 50	14.394	13.625	12.922
20 55	11.409	10.907	10·441	20 55	12.856	12.241	11.673
20 60	9.954	9.569	9·209	20 60	11.184	10.714	10.276
20 65	8.204	7.931	7·673	20 65	9.335	8.998	8.680
20 70	6.584	6·399	6·222	20 70	7.503	7°275	7.058
20 75	5.141	5·021	4·905	20 75	5.742	5°598	5.460
20 80	3.833	3·759	3·688	20 80	4.263	4°177	4.093
20 85	2.786	2·743	2·701	20 85	3.002	2°953	2.906
20 90	1.958	1·933	1·910	20 90	2.041	2°015	1.990
20 95 25 25 25 30 25 35 25 40	1.125 16.321 15.724 15.046 14.277	1.115 15.265 14.743 14.149	1.105 14.322 13.862 13.339 12.741	20 95 25 25 25 30 25 35 25 40	1.266 18.866 18.271 17.537 16.641	1.255 17.505 16.373 15.601	1.243 16.300 15.868 15.332 14.664
25 45	13.403	12.697	12.052	25 45	15·552	14.650	13.831
25 50	12.399	11.799	11.247	25 50	14·233	13.479	12.789
25 55	11.226	10.737	10.283	25 55	12·735	12.129	11.570
25 60	9.817	9.441	9.089	25 60	11·096	10.631	10.198
25 65	8.110	7.842	7.589	25 65	9·274	8.940	8.625
25 70	6.522	6·340	6·165	25 70	7:462	7·236	7.021
25 75	5.102	4·983	4·869	25 75	5:717	5·574	5.437
25 80	3.809	3·737	3·666	25 80	4:248	4·163	4.080
25 85	2.773	2·730	2·688	25 85	2:994	2·945	2.899
25 90	1.950	1·926	1·903	25 90	2:037	2·011	1.986
25 95	1.122	1·112	1.102	25 95	1.265	1.253	1°241
30 30	15.198	14·279	13.451	30 30	17.763	16.564	15°493
30 35	14.593	13·745	12.977	30 35	17.121	16.011	15°016
30 40	13.893	13·126	12.428	30 40	16.310	15.309	14°406
30 45	13.083	12·406	11.786	30 45	15.297	14.422	13°627
30 50	12·139	11.560	11.026	30 50	14.042	13·306	12.631
30 55	11·022	10.547	10.106	30 55	12.595	12·000	11.451
30 60	9·665	9.298	8.954	30 60	10.996	10·538	10.112
30 65	8·005	7.743	7.495	30 65	9.206	8·876	8.565
30 70	6·452	6.273	6.101	30 70	7.418	7·194	6.981
30 75	5.058	4.940	4.828	30 75	5.689	5°547	5°412
30 80	3.783	3.711	3.641	30 80	4.232	4°147	4°065
30 85	2.758	2.715	2.674	30 85	2.985	2°937	2°890
30 90	1.942	1.918	1.895	30 90	2.032	2°006	1°981
30 95	1.118	1.109	1.099	30 95	1.262	1°251	1°239

For explanation see pp. (41-43).

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883

	TWO M	ALES			TWO FE	MALES	
Ages	21/2 %	3 %	3½ %	Ages	2½ %	3 %	3 ½ %
35 35	14.067	13·277	12.559	35 35	16.582	15·543	14.608
35 40	13.449	12·727	12.068	35 40	15.878	14·929	14.071
35 45	12.718	12·074	11.483	35 45	14.965	14·127	13.363
35 50	11.845	11·290	10.777	35 50	13.797	13·084	12.431
35 55	10.792	10·334	9.907	35 55	12.420	11·841	11.304
35 60	9°494	9·138	8.804	35 60	10·876	10.427	10.008
35 65	7°886	7·630	7.389	35 65	9·127	8.801	8.495
35 70	6°373	6 197	6.029	35 70	7·368	7.146	6.936
35 75	5°007	4·892	4.781	35 75	5·659	5.518	5.383
35 80	3 °753	3·682	3.613	35 80	4·214	4.130	4.048
35 85 35 90 35 95 40 40 40 45	2.740 1.932 1.114 12.923 12.285	2.698 1.909 1.105 12.254 11.681	2.657 1.886 1.095 11.642 11.126	35 85 35 90 35 95 40 40 40 45	2.975 2.027 1.260 15.296 14.510	2.927 2.001 1.248 14.418	2.881 1.976 1.237 13.619
40 50	11.501	10.975	10.487	40 50	13.459	12·781	12·156
40 55	10.529	10.090	9.680	40 55	12.183	11·623	11·105
40 60	9.301	8.957	8.634	40 65	10.716	10·279	9·871
40 65	7.753	7.504	7.269	40 65	9.025	8·706	8·406
40 70	6.284	6.112	5.948	40 70	7.306	7·088	6·880
40 75 40 80 40 85 40 90 40 95	4.951 3.718 2.720 1.921 1.110	4.837 3.648 2.679 1.898	4.728 3.581 2.638 1.875 1.091	40 75 40 80 40 85 40 50 40 95	5.623 4.194 2.964 2.021 1.258	5.484 4.110 2.917 1.995 1.246	5.351 4.029 2.871 1.971 1.235
45 45	11.753	11·200	10.689	45 45	13.869	13.149	12·489
45 50	11.079	10·589	10.134	45 50	12.969	12.338	11·757
45 55	10.210	9·795	9.407	45 55	11.830	11.302	10·812
45 60	9.074	8·744	8.434	45 60	10.477	10.059	9·667
45 65	7.600	7·360	7.132	45 65	8.875	8.565	8·274
45 70	6·184	6.016	5.856	45 70	7:217	7.003	6.801
45 75	4·887	4.776	4.669	45 75	5:574	5.437	5.306
45 80	3·680	3.611	3.544	45 80	4:168	4.085	4.005
45 85	2·698	2.657	2.617	45 85	2:951	2.904	2.858
45 90	1·909	1.886	1.863	45 90	2:014	1.989	1.964
45 95	1.105	1.095	1.086	45 95	1.255	1.243	1.232
50 50	10.532	10.088	9.675	50 50	12.245	11.680	11.157
50 55	9.795	9.412	9.053	50 55	11.284	10.801	10.351
50 60	8.781	8.471	8.179	50 60	10.092	9.701	9.335
50 65	7.411	7.181	6.963	50 65	8.622	8.328	8.052
50 70	6.064	5.902	5°747	50 70	7.061	6.856	6.660
50 75	4.813	4.705	4°601	50 75	5.484	5.351	5.223
50 80	3.636	3.568	3°503	50 80	4.119	4.037	3.959
50 85	2.672	2.632	2°592	50 85	2.926	2.880	2.835
50 90	1.895	1.872	1°849	50 90	2.003	1.978	1.953

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883

	TWO M	ALES			TWO FE	MALES	
Ages	2½ %	3 %	$3\frac{1}{2}\%$	Ages	2 ½ %	3 %	3 ½ %
50 95	1.099	1.090	1.080	50 95	1.250	1.239	1·228
55 55	9.212	8.873	8.555	55 55	10.523	10.100	9·704
55 60	8.361	8.080	7.814	55 60	9.534	9.182	8·852
55 65	7.138	6.925	6.722	55 65	8.245	7.974	7·718
55 70	5.898	5.744	5.597	55 70	6.824	6.630	6·446
55 75	4.717	4.612	4.512	55 75	5°343	5.216	5.094
55 80	3.582	3.516	3.453	55 80	4°038	3.959	3.883
55 85	2.642	2.603	2.564	55 85	2°882	2.837	2.793
55 90	1.879	1.856	1.834	55 90	1°979	1.954	1.930
55 95	1.093	1.083	1.074	55 95	1°239	1.228	1.217
60 60	7.705	7·465	7.238	60 60	8·771	8·471	8·187
60 65	6.685	6·497	6.319	60 65	7·710	7·472	7·245
60 70	5.608	5·468	5.335	60 70	6·481	6·306	6·138
60 75	4.546	4·429	4.356	60 75	5·143	5·025	4·910
60 80	3.491	3·428	3.367	60 80	3·929	3·854	3·781
60 85	2·596	2·558	2·520	60 85	2·826	2.783	2.740
60 90	1·857	1·835	1·813	60 90	1·952	1.928	1.904
60 95	1·085	1·076	1·066	60 95	1·229	1.217	1.206
65 65	5·911	5·759	5·614	65 65	6·910	6.713	6.526
65 70	5·053	4·936	4·825	65 70	5·927	5.777	5.633
65 75	4.175	4.091	4.010	65 75	4.793	4.688	4.587
65 80	3.262	3.206	3.152	65 80	3.722	3.654	3.587
65 85	2.463	2.428	2.394	65 85	2.713	2.673	2.633
65 90	1.786	1.765	1.745	65 90	1.893	1.870	1.847
65 95	1.058	1.049	1.041	65 95	1.203	1.192	1.181
70 70	4.407	4·314	4.225	70 70	5·206	5.086	4.971
70 75	3.719	3·649	3.582	70 75	4·313	4.226	4.141
70 80	2.963	2·915	2.869	70 80	3·427	3.367	3.310
70 85	2.276	2·245	2.215	70 85	2·549	2.512	2.476
70 90	1.676	1·657	1.638	70 90	1·806	1.785	1.764
70 95	1.011	1.002	994	70 95	1.165	1.154	1·144
75 75	3.215	3.161	3·108	75 75	3.671	3.604	3·539
75 80	2.625	2.586	2·548	75 80	2.997	2.949	2·903
75 85	2.063	2.036	2·010	75 85	2.287	2.256	2·226
75 90	1.551	1.534	1·518	75 90	1.657	1.639	1·620
75 95 80 80 80 85 80 90 80 95	.958 2.199 1.773 1.367 .872	.950 2.169 1.752 1.353 .865	'942 2'141 1'732 1'340 '858	75 95 80 80 80 85 80 90 80 95	1.094 2.523 1.985 1.478 1.004	1.084 2.486 1.960 1.462	1.075 2.451 1.936 1.447 987
85 85 85 90 85 95 90 90 90 95 95 95	1.469 1.164 .772 .949 .655 .485	1.453 1.153 .766 .941 .651	1.438 1.143 .760 .932 .646 .478	85 85 85 90 85 95 90 90 90 95 95 95	1.617 1.243 .877 .988 .725 .557	1.599 1.231 .870 .979 .719 .554	1.581 1.219 .863 .970 .714 .550

For explanation see pp. (41-43).

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883. MALE AND FEMALE

F	EMALE TE	HE ELDER	,	-	MALE TH	E ELDER	
Ages	$2\frac{1}{2}\%$	3 %	31/2 %	Ages	$2\frac{1}{2}\%$	3 %	3 ½ %
M. F. 20 20 20 25 20 30 20 35 20 40	18·580 18·124 17·568 16·890 16·067	17·235 16·848 16·375 15·797 15·087	16.047 15.717 15.313 14.817 14.202	F. M. 20 20 20 25 20 30 20 35 20 40	18·580 17·887 17·114 16·258 15·311	17.235 16.638 15.971 15.229 14.402	16.047 15.530 14.952 14.304 13.579
20 45	15.066	14.211	13.434	20 45	14.263	13.479	12·763
20 50	13.842	13.122	12.463	20 50	13.092	12.435	11·831
20 55	12.436	11.854	11.316	20 55	11.761	11.233	10·743
20 60	10.880	10.431	10.012	20 60	10.207	9.806	9·431
20 65	9.129	8.803	8.497	20 65	8.373	8.091	7·825
20 70	7·370	7'149	6.938	20 70	6.694	6·503	6·321
20 75	5·662	5'521	5.387	20 75	5.209	5·086	4·968
20 80	4·218	4'133	4.051	20 80	3.872	3·797	3·725
20 85	2·977	2'929	2.883	20 85	2.809	2· 7 65	2·722
20 90	2·028	2'002	1.977	20 90	1.969	1·945	1·921
20 95	1.261	1.249	1.238	20 95	1.129	1°119	1.110
25 25	17.497	16.304	15.242	25 25	17.497	16°304	15.242
25 30	17.014	15.890	14.886	25 30	16.790	15°689	14.705
25 35	16.411	15.372	14.439	25 35	15.993	14°995	14.098
25 40	15.659	14.721	13.873	25 40	15.097	14°211	13.408
25 45	14.726	13.903	13.154	25 45	14.093	13·324	12.623
25 50	13.566	12.870	12.232	25 50	12.959	12·313	11.719
25 55	12.221	11.655	11.131	25 55	11.659	11·139	10.655
25 60	10.719	10.281	9.871	25 60	10.133	9·736	9.365
25 65	9.016	8.697	8.396	25 65	8.322	8·043	7.779
25 70	7·296	7.078	6.871	25 70	6.660	6·471	6·291
25 75	5·616	5.477	5.344	25 75	5.187	5·065	4·948
25 80	4·190	4.106	4.025	25 80	3.859	3·785	3·713
25 85	2·962	2.915	2.869	25 85	2.801	2·758	2·715
25 90	2·020	1.995	1.970	25 90	1.965	1·941	1·918
25 95 30 30 30 33 30 40 30 45	1.257 16.383 15.864 15.197 14.344	1.246 15.337 14.888 14.307 13.557	1.234 14.399 14.008 13.501 12.840	25 95 30 30 30 35 30 40 30 45	1°128 16°383 15°660 14°833 13°887	1.118 15.337 14.704 13.976	1.108 14.399 13.842 13.199 12.456
30 50	13.259	12.589	11.973	30 50	12·802	12·169	11.588
30 55	11.981	11.433	10.925	30 55	11·542	11·030	10.555
30 60	10.539	10.112	9.714	30 60	10·049	9·658	9.292
30 65	8.889	8.577	8.283	30 65	8·266	7·990	7.729
30 70	7.212	6.998	6.794	30 70	6·623	6·435	6.257
30 75	5.564	5.427	5.296	30 75	5·164	5.043	4.926
30 80	4.160	4.077	3.996	30 80	3·845	3.771	3.700
30 85	2.945	2.898	2.853	30 85	2·793	2.750	2.708
30 90	2.011	1.986	1.961	30 90	1·961	1.937	1.913
30 95	1.253	1.242	1.231	30 95	1·126	1.116	1.106

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883. MALE AND FEMALE

]	FEMALE TE	HE ELDER			MALE THI	E ELDER	
Ages	21 %	3 %	31 %	Ages	21 %	3 %	31 %
M. F. 35 35 35 40 35 45 35 50 35 55	15·229 14·659 13·904 12·909 11·711	14·327 13·827 13·159 12·269 11·183	13.511 13.071 12.479 11.680 10.694	F. M. 35 35 35 40 35 45 35 50 35 55	15.229 14.488 13.621 12.603 11.399	14°327 13°671 12°901 11°989 10°898	13.511 12.928 12.242 11.423 10.433
35 60	10·338	9.924	9.537	35 60	9.950	9.566	9·206
35 65	8·747	8.443	8.156	35 65	8.201	7.929	7·671
35 70	7·117	6.907	6.708	35 70	6.582	6.396	6·219
35 75	5·505	5.370	5.241	35 75	5.138	5.018	4·902
35 80	4·125	4.043	3.964	35 80	3.830	3.757	3·686
35 85 35 90 35 95 40 40 40 45	2.926 2.001 1.249 14.022 13.379	2.880 1.976 1.237 13.258 12.687	2.835 1.951 1.226 12.562	35 85 35 90 35 95 40 40 40 45	2.784 1.956 1.124 14.022 13.256	2.741 1.932 1.114 13.258 12.574	2·699 1·909 1·104 12·562 11·949
40 50	12:497	11.893	11.337	40 50	12.331	11.742	11·199
40 55	11:399	10.895	10.427	40 55	11.205	10.721	10·270
40 60	10:109	9.710	9.337	40 65	9.820	9.445	9·093
40 65	8:587	8.292	8.013	40 65	8.119	7.852	7·598
40 70	7:010	6.806	6.611	40 70	6.531	6.348	6·174
40 75 40 80 40 85 40 90 40 95	5:438 4:085 2:904 1:989	5·306 4·004 2·858 1·965 1·232	5·180 3·926 2·814 1·940 1·221	40 75 40 80 40 85 40 90 40 95	5·108 3·813 2·775 1·951 1·122	4.989 3.740 2.732 1.927 1.112	4·875 3·669 2·690 1·903 1·102
45 45	12.736	12·108	11.529	45 45	12.736	12·108	11·529
45 50	11.988	11·430	10.914	45 50	11.932	11·381	10·871
45 55	11.017	10·544	10.103	45 55	10.918	10·458	10·028
45 60	9.837	9·457	9.101	45 60	9.627	9·265	8·926
45 65	8.402	8·117	7.849	45 65	7.999	7·739	7·493
45 70	6.889	6.691	6·502	45 70	6·460	6.280	6·109
45 75	5.363	5.234	5·110	45 75	5·067	4.950	4·837
45 80	4.040	3.961	3·884	45 80	3·791	3.718	·3·649
45 85	2.879	2.834	2·790	45 85	2·763	2.720	2·679
45 90	1.976	1.952	1·927	45 90	1·945	1.921	1·898
45 95	1.238	1.226	1.215	45 95	1.119	1·110	1·100
50 50	11.331	10.833	10.370	50 50	11.331	10·833	10·370
50 55	10.516	10.084	9.681	50 55	10.465	10·040	9·643
50 60	9.482	9.127	8.795	50 60	9.309	8·970	8·651
50 65	8.169	7.899	7.643	50 65	7.795	7·546	7·311
50 70	6·744	6.553	6·370	50 70	6·332	6·159	5.994
50 75	5·276	5.151	5·030	50 75	4·992	4·878	4.768
50 80	3·990	3.912	3·837	50 80	3·749	3·678	3.609
50 85	2·851	2.806	2·763	50 85	2·740	2·698	2.658
50 90	1·961	1.937	1·913	50 90	1·934	1·910	1.887

For explanation see pp. (41-43).

Value of an Annuity for the Joint Continuance of Two Lives according to the GOVERNMENT EXPERIENCE TABLE, 1883. MALE AND FEMALE

]	FEMALE TI	HE ELDER	3		MALE THE	E ELDER	
Ages	2½ %	3 %	31/2 %	Ages	2½ %	3 %	3 ½ %
M. F. 50 95 55 55 55 60 55 65 55 70	1.231 9.825 8.974 7.830 6.539	1·220 9·447 8·656 7·582 6·358	1·208 9·093 8·356 7·346 6·186	F. M. 50 95 55 55 55 60 55 65 55 70	1·116 9·825 8·845 7·487 6·138	1·106 9·447 8·536 7·256 5·974	1.097 9.093 8.245 7.037 5.817
55 75 55 80 55 85 55 90 55 95	5·161 3·927 2·818 1·944 1·223	5.040 3.851 2.774 1.920 1.212	4.925 3.778 2.732 1.896 1.201	55 75 55 80 55 85 55 90 55 95	4.873 3.679 2.700 1.912 1.106	4.763 3.610 2.659 1.888 1.097	4.658 3.544 2.619 1.866 1.087
60 60 60 65 60 70 60 75 60 80	8·201 7·279 6·182 4·955 3·818	7 '934 7 '063 6 '020 4 '844 3 '747	7.681 6.857 5.866 4.737 3.678	60 60 60 65 60 70 60 75 60 80	8·201 7·049 5·858 4·706 3·586	7.934 6.843 5.707 4.603 3.520	7.681 6.647 5.564 4.504 3.457
60 85 60 90 60 95 65 65 65 70	2.766 1.920 1.214 6.374 5.528	2.724 1.897 1.203 6.202 5.394	2.683 1.874 1.192 6.038 5.266	60 85 60 90 60 95 65 65 65 70	2.651 1.887 1.098 6.374 5.394	2.611 1.864 1.088 6.202 5.264	2.572 1.842 1.079 6.038 5.140
65 75 65 80 65 85 65 90 65 95	4.524 3.554 2.619 1.844 1.182	4'428 3'491 2'581 1'822	4.336 3.429 2.543 1.800 1.161	65 75 65 80 65 85 65 90 65 95	4.408 3.408 2.549 1.832 1.076	4.316 3.348 2.511 1.810 1.066	4.228 3.289 2.475 1.789 1.057
70 70 70 75 70 80 70 85 70 90	4.781 4.001 3.213 2.415 1.727	4.675 3.923 3.159 2.381 1.707	4.574 3.848 3.107 2.348 1.688	70 70 70 75 70 80 70 85 70 90	4.781 3.995 3.152 2.399 1.751	4.675 3.918 3.100 2.366 1.731	4.574 3.843 3.049 2.333 1.711
70 95 75 75 75 80 75 85 75 90	1·125 3·430 2·829 2·181 1·595	1.115 3.370 2.785 2.152 1.577	1.105 3.311 2.742 2.124 1.560	70 95 75 75 75 80 75 85 75 90	1.044 3.430 2.774 2.160 1.610	1.035 3.370 2.731 2.132 1.592	1.027 3.311 2.690 2.104 1.575
75 95 80 80 80 85 80 90 80 95	1.063 2.352 1.868 1.402	1.054 2.320 1.845 1.388 .954	1 °045 2 °288 1 °823 1 °373 °946	75 95 80 80 80 85 80 90 80 95	*984 2*352 1*882 1*440 *908	*976 2*320 1*859 1*425	.968 2.288 1.837 1.410
85 85 85 90 85 95 90 90 90 95 95 95	1.540 1.191 .846 .968 .712 .519	1.524 1.179 .839 .960 .707	1.507 1.168 .832 .951 .702 .512	85 85 85 90 85 95 90 90 90 95 95 95	1.540 1.215 .799 .968 .666	1.524 1.203 .793 .960 .661	1·507 1·192 ·787 ·951 ·657 ·512

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
to 10	21.0079	19·3289	17.8656	20 60	9.6503	9·2849	8·9422
10 15	20.4046	18·8209	17.4348	20 65	8.0149	7·7544	7·5079
10 20	19.6575	18·1842	16.8879	20 70	6.3944	6·2197	6·0531
10 25	18.9794	17·6168	16.4105	20 75	4.8992	4·7883	4·6817
10 30	18.1217	16·8869	15.7863	20 80	3.6458	3·5784	3·5132
10 35	17·1325	16.0360	15.0513	20 85	2.6828	2.6429	2.6042
10 40	15·9913	15.0410	14.1806	20 90	1.7153	1.6974	1.6799
10 45	14·6570	13.8586	13.1296	20 95	.4122	.4099	.4076
10 50	13·1800	12.5312	11.9335	25 25	17.5703	16.3949	15.3455
10 55	11·5676	11.0611	10.5905	25 30	16.9261	15.8382	14.8621
to 60	9.8667	9.4891	9·1350	25 35	16·1390	15·1537	14.2645
to 65	8.1707	7.9025	7·6489	25 40	15·1822	14·3135	13.5241
to 70	6.4997	6.3206	6·1498	25 45	14·0130	13·2723	12.5945
to 75	4.9661	4.8528	4·7440	25 50	12·6787	12·0695	11.5075
to 80	3.6859	3.6173	3·5509	25 55	11·1886	10·7083	10.2615
to 85 to 90 to 95 t5 15 t5 20	2·7056 1·7242 ·4129 19·8661 19·1866	2.6652 1.7062 .4107 18.3635 17.7798	2.6259 1.6885 .4084 17.0435 16.5386	25 60 25 65 25 70 25 75 25 80	9.5902 7.9774 6.3726 4.8875 3.6400	9·2291 7·7191 6·1990 4·7771 3·5728	8·8902 7·4748 6·0332 4·6710
15 25 15 30 15 35 15 40 15 45	18·5708 17·7738 16·8405 15·7501 14·4623	17.2617 16.5811 15.7762 14.8240 13.6816	16·1006 15·5163 14·8192 13·9848 12·9684	25 85 25 90 25 95 30 30 30 35	2.6801 1.7145 .4121 16.3734 15.6810	2.6404 1.6967 .4098 15.3561 14.7501	2.601; 1.679; 407; 14.4399
15 50	13.0271	12·3908	11.8045	30 40	14.8162	13.9872	13.2322
15 55	11.4524	10·9544	10.4915	30 45	13.7313	13.0182	12.364
15 60	9.7844	9·4122	9.0633	30 50	12.4690	11.8779	11.3320
15 65	8.1160	7·8512	7.6007	30 55	11.0378	10.5688	10.1322
15 70	6.4676	6·2903	6.1213	30 60	9.4855	9.1311	8.798
15 75	4.9502	4.8378	4.7298	30 65	7.9071	7.6525	7.411
15 80	3.6801	3.6118	3.5459	30 70	6.3275	6.1559	5.992
15 85	2.7055	2.6652	2.6260	30 75	4.8598	4.7503	4.645
15 90	1.7272	1.7092	1.6915	30 80	3.6234	3.5567	3.492
15 95	-4138	.4115	4093	30 85	2.6705	2.6310	2.592
20 20 20 25 20 30 20 35 20 40	18·5817 18·0385 17·3149 16·4510 15·4240	17·2554 16·7952 16·1739 15·4263 14·5274	16.0809 15.6891 15.1533 14.5035 13.7141	30 90 30 95 35 35 35 40 35 45	1.7102 .4115 15.0950 14.3405 13.3625	1.6925 .4092 14.2329 13.5632 12.6859	1.6750 .4070 13.4490 12.853
20 45 20 50 20 55	14·1936 12·8092 11·2791	13.4344 12.1880 10.7916	12.7402 11.6153 10.3381	35 50 35 55 35 60	12·1954 10·8436 9·3536	11.6285 10.3896 9.0080	9.966 8.683

For explanation see pp. (41-43).

Value	Value of an Annuity for the Joint Continuance of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE									
Ages	3 %	3 ½ %	4 %	Ages	3 %	3½ %	4 %			
35 65	7.8211	7.5714	7°3350	55 70	5.6627	5.5216	5·3865			
35 70	6.2742	6.1050	5°9437	55 75	4.4616	4.3673	4·2764			
35 75	4.8279	4.7197	4°6157	55 80	3.3947	3.3349	3·2770			
35 80	3.6051	3.5389	3°4749	55 85	2.5429	2.5063	2·4706			
35 85	2.6600	2.6207	2°5825	55 90	1.6568	1.6398	1·6231			
35 90	1.7058	1 6881	1.6707	55 95	'4051	.4029	.4007			
35 95	.4110	4087	.4065	60 60	7'1988	6.9834	6.7787			
40 40	13.7103	12 9996	12.3479	60 65	6'3213	6.1504	5.9872			
40 45	12.8622	12 2343	11.6557	60 70	5'3013	5.1755	5.0548			
40 50	11.8177	11 2841	10.7894	60 75	4'2332	4.1469	4.0638			
40 55	10.5734	10·1406	9.7366	60 80	3.2576	3·2018	3·1476			
40 60	9.1705	8·8373	8.5241	60 85	2.4634	2·4285	2·3945			
40 65	7.7034	7·4605	7.2304	60 90	1.6224	1·6059	1·5897			
40 70	6.2029	6·0372	5.8790	60 95	.4010	·3987	·3965			
40 75	4.7868	4·6802	4.5777	65 65	5.6519	5·5115	5·3771			
40 80	3.5821	3.5166	3.4533	65 70	4.8312	4.7242	4.6213			
40 85	2.6476	2.6085	2.5705	65 75	3.9266	3.8507	3.7775			
40 90	1.7005	1.6828	1.6655	65 80	3.0687	3.0181	2.9690			
40 95	.4103	.4080	.4058	65 85	2.3514	2.3190	2.2873			
45 45	12.1619	11.5979	11.0760	65 90	1.5719	1.5561	1.5406			
45 50	11.2685	10·7807	10·3270	65 95	3944	3922	3901			
45 55	10.1663	9·7638	9·3873	70 70	4.2226	4.1378	4.0560			
45 60	8.8855	8·5709	8·2747	70 75	3.5095	3.4470	3.3865			
45 65	7.5145	7·2821	7·0618	70 80	2.8014	2.7580	2.7159			
45 70	6.0851	5·9249	5·7719	70 85	2.1880	2.1591	2.1309			
45 75	4.7171	4.6132	4.5132	70 90	1.4989	1.4841	1.4696			
45 80	3.5425	3.4782	3.4160	70 95	.3854	.3833	.3812			
45 85	2.6257	2.5872	2.5497	75 75	2.9876	2.9395	2.8928			
45 90	1.6917	1.6742	1.6570	75 80	2.4424	2.4077	2.3739			
45 95	.4094	4071	.4049	75 85	1.9508	1.9265	1.9028			
50 50	10·5428	10·1123	9.7103	75 90	1.3791	1.3659	1.3530			
50 55	9·6109	9·2481	8.9078	75 95	.3684	.3663	.3643			
50 60	8·4864	8·1970	7.9240	80 80	2.0488	2.0225	1.9969			
50 65	7·2447	7·0270	6.8204	80 85	1.6761	1.6569	1.6381			
50 70	5·9148	5·7624	5.6167	80 90	1.2319	1.2206	1.2096			
50 75	4.6152	4.5152	4.4189	80 95	°3467	3448	3429			
50 80	3.4839	3.4214	3.3609	85 85	1°4025	1.3877	1.3732			
50 85	2.5929	2.5551	2.5183	85 90	1°0676	1.0583	1.0491			
50 90	1.6776	1.6603	1.6433	85 95	°3172	3155	3138			
50 95	-4076	4053	4031	90 90	°8693	8625	8557			
55 55 55 60 55 65	8.8676 7.9310 6.8562	8·5546 7·6749 6·6590	8·2598 7·4327 6·4713	90 95 95 95	·2850 ·1321	·2835 ·1314	·1308			

Single Payment to secure £1 at the Death of either of Two Lives according to the NORTHAMPTON TABLE 3 % Ages 3 % Ages Ages 3 % 15 15 .5273 50 75 50 80 30 55 ·6001 .8406 30 60 .7269 15 20 .5439 .8730 15 25 .5564 30 65 .7587 50 85 9013 ·5708 ·5878 15 30 30 70 .7949 .8321 50 90 '9218 15 35 30 75 50 95 .9640 15 40 .6080 30 80 ·8681 55 55 55 60 ·747I 15 45 .6305 30 85 .8986 .7644 .6563 15 50 30 90 19205 55 65 .7864 15 55 15 60 .6840 30 95 .9639 55 70 *8138 .7149 .6294 35 35 55 75 .8442 15 65 .7496 .6443 55 80 35 40 .8750 15 70 .6615 .7884 35 45 55 85 9025 15 75 15 80 .8278 35 50 .6822 55 90 9224 .8654 15 55 95 60 60 35 55 .7049 '9641 35 60 15 85 8970 .7312 7785 20 20 .5592 35 65 .7618 60 65 '7970 .5706 20 25 70 .7970 35 60 70 8212 .8334 20 30 .5839 35 75 60 75 60 80 ·8489 20 35 '5997 35 ·8688 .8778 20 40 .6186 35 85 .8990 60 85 9040 .6398 20 45 35 90 9207 60 90 9231 .6644 20 50 .9639 60 95 35 95 9641 20 .6908 55 40 40 .6574 65 65 8115 20 60 17205 40 45 .6727 65 70 .8316 20 65 7541 40 50 .6915 65 75 *8556 '7918 20 70 40 55 65 80 '7125 .8817 40 60 20 75 .8302 65 85 °7371 °9061 .8669 40 65 '7661 65 90 °924I 20 85 .8980 40 70 65 95 '7999 '9642 20 90 9202 40 75 .8353 .8468 70 70 .5811 25 25 40 80 .8698 70 75 70 80 °8660 25 30 .5932 40 85 .8996 °8881 25 35 .6079 40 90 9210 70 85 9098 25 40 .6256 40 95 .9640 '9259 70 90 25 45 .6457 .6861 45 45 70 95 .9643 25 50 .6692 75 75 75 80 .7028 45 50 :8802 25 55 25 60 .6946 45 55 45 60 .7216 '8973 .7442 .7234 75 85 9154 25 65 .7562 45 65 .7713 75 90 '9289 .8034 25 70 '7932 45 70 75 95 .9645 25 75 25 80 .8311 75 80 .8375 80 80 45 °909I .8675 45 .8711 80 85 9230 25 85 .8983 45 85 9003 80 90 9330 25 90 80 95 85 85 9204 45 90 .9213 .9648 25 95 .9639 .9640 45 95 9327 30 30 .6042 50 50 .7170 85 90 .9396 6175 30 35 50 55 50 60 .7334 85 95 °9654 .6339 30 40

For explanation see pp. (41-43).

50 65

50 70

30 45

30 50

.6527

.6749

.7536

·7783 ·8083

90 90

90 95

95 95

.9436

.9657

9691

Single Payment to secure £1 at the Death of either of Two Lives according to the CARLISLE TABLE

	CARLISLE TABLE										
Ages	3 %	Ages	3 %	Ages	3 %						
15 15	*4202	30 55	.6479	50 75	*8246						
15 20	*4343	30 60	.6933	50 80	*8528						
15 25	*4526	30 65	.7313	50 85	*8823						
15 30	*4739	30 70	.7768	50 90	*9020						
15 35	*4963	30 75	.8190	50 95	*8943						
15 40	*5238	30 80	·8495	55 55	.7057						
15 45	*5520	30 85	·8804	55 60	.7350						
15 50	*5884	30 90	·9006	55 65	.7606						
15 55	*6351	30 95	·8931	55 70	.7956						
15 60	*6839	35 35	·5421	55 75	.8307						
15 65	7245	35 40	°5617	55 80	·8567						
15 70	7723	35 45	°5826	55 85	·8846						
15 75	8161	35 50	°6122	55 90	·9037						
15 80	8475	35 55	°6528	55 95	·8959						
15 85	8792	35 60	°6968	60 60	·7584						
20 20	*4468	35 65	'7338	60 65	*7790						
20 25	*4635	35 70	'7784	60 70	*8088						
20 30	*4831	35 75	'8200	60 75	*8399						
20 35	*5039	35 80	'8501	60 80	*8632						
20 40	*5302	35 85	'8807	60 85	*8890						
20 45	°5571	35 90	·9009	60 90	•9068						
20 50	°5924	35 95	·8933	60 95	•8993						
20 55	°6380	40 40	·5782	65 65	•7948						
20 60	°6860	40 45	·5961	65 70	•8196						
20 65	°7259	40 50	·6227	65 75	•8469						
20 70	.7731	40 55	·6604	65 80	·8677						
20 75	.8166	40 60	·7022	65 85	·8917						
20 80	.8478	40 65	·7377	65 90	·9088						
20 85	.8793	40 70	·7811	65 95	·9010						
20 90	.8999	40 75	·8219	70 70	·8382						
25 25	°4782	40 80	·8514	70 75	*8601						
25 30	°4958	40 85	·8816	70 80	*8769						
25 35	°5148	40 90	·9015	70 85	*8974						
25 40	°5391	40 95	·8940	70 90	*9130						
25 45	°5644	45 45	·6105	70 95	*9054						
25 50	*5983	45 50	·6336	75 75	·8768						
25 55	*6425	45 55	·6680	75 80	·8896						
25 60	*6893	45 60	·7069	75 85	·9063						
25 65	*7283	45 65	·7405	75 90	·9197						
25 70	*7747	45 70	·7826	75 95	·9128						
25 75	·8176	45 75	·8226	80 80	·8992						
25 80	·8484	45 80	·8518	80 85	·9128						
25 85	·8797	45 85	·8819	80 90	·9246						
25 90	·9002	45 90	·9017	80 95	·9183						
25 95	·8926	45 95	·8942	85 85	·9226						
30 30	*5111	50 50	·6522	85 90	·9320						
30 35	*5279	50 55	·6818	85 95	·9269						
30 40	*5500	50 60	·7166	90 90	·9392						
30 45	*5733	50 65	·7469	90 95	·9354						
30 50	*6053	50 70	·7863	95 95	·9306						

For explanation see pp. (41-43).

Single Payment to secure £1 at the Death of either of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	$3\frac{1}{2}\%$	4 %	Ages	3 %	3½ %	4 %			
10 10	*35900	*31256	*27439	20 70	•78463	.75586	°72872			
10 15	*37657	*32974	*29096	20 75	•82818	.80426	°78147			
10 20	*39833	*35125	*31200	20 80	•86469	.84518	°82641			
10 25	*41808	*37045	*33036	20 85	•89273	.87681	°86138			
10 30	*44306	*39514	*35437	20 90	•92091	.90878	°89693			
10 35	.47187	'42391	*38263	20 95	*95887	*95232	·94586			
10 40	.50511	'45756	*41612	25 25	*45912	*41177	·37132			
10 45	.54397	'49754	*45655	25 30	*47788	*43060	·38991			
10 50	.58699	'54243	*50255	25 35	*50081	*45375	·41290			
10 55	.63396	'59214	*55421	25 40	*52868	*48216	·44137			
10 60	.68350	.64530	·61019	25 45	.56273	·51737	*47713			
10 65	.73289	.69895	·66735	25 50	.60159	·55804	*51894			
10 70	.78156	.75245	·72500	25 55	.64499	·60407	*56686			
10 75	.82623	.80208	·77907	25 60	.69155	·65409	*61960			
10 80	.86352	.84386	·82496	25 65	.73852	·70515	*67404			
10 85	·89207	•87606	·86054	25 70	*78527	•75656	·72948			
10 90	·92065	•90849	·89659	25 75	*82852	•80464	·78188			
10 95	·95885	•95230	·94583	25 80	*86486	•84537	·82662			
15 15	·39225	•34520	·30601	25 85	*89281	•87690	·86147			
15 20	·41205	•36494	·32543	25 90	*92094	•90881	·89695			
15 25	*42998	*38246	*34228	25 95	*95887	*95233	*94586			
15 30	*45319	*40548	*36475	30 30	*49398	*44690	*40615			
15 35	*48038	*43270	*39156	30 35	*51415	*46739	*42662			
15 40	*51214	*46488	*42365	30 40	*53934	*49319	*45259			
15 45	*54965	*50353	*46275	30 45	*57094	*52596	*48597			
15 50	.59145	*54718	•50751	30 50	·60770	°56452	·52569			
15 55	.63731	*59575	•55801	30 55	·64939	°60879	·57183			
15 60	.68589	*64790	•61295	30 60	·69460	°65741	·62313			
15 65	.73449	*70069	•66920	30 65	·74057	°70741	·67647			
15 70	.78250	*75347	•72610	30 70	·78658	°75802	·73107			
15 75	·82669	*80259	777962	30 75	·82933	*80555	·78287			
15 80	·86369	*84405	82516	30 80	·86534	*84591	·82722			
15 85	·89207	*87606	86054	30 85	·89309	*87721	·86183			
15 90	·92057	*90839	89648	30 90	·92106	*90895	·89711			
15 95	·95882	*95227	94580	30 95	·95889	*95235	·94588			
20 20	·42966	*38268	*34303	35 35	•53122	*48488	*44424			
20 25	·44548	*39824	*35810	35 40	•55319	*50753	*46717			
20 30	·46656	*41925	*37871	35 45	•58168	*53720	*49752			
20 35	·49172	*44453	*40370	35 50	•61567	*57295	*53446			
20 40	·52163	*47493	*43407	35 55	•65504	*61485	*57821			
20 45 20 50 20 55 20 60 20 65	*55747 *59779 *64236 *68980 *73743	•51189 •55403 •60126 •65221 •70396	*47152 *51479 *56391 *61760 *67277	35 65 35 70 35 75 35 80	*69844 *74308 *78813 *83026 *86587	·66157 ·71015 ·75974 ·80658 ·84651	·62756 ·67942 ·73293 ·78401 ·82789			

For explanation see pp. (41-43).

Single Payment to secure £1 at the Death of either of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	3½ %	4 %
35 85 35 90 35 95 40 40 40 45	·89340 ·92119 ·95890 ·57155 ·59625	·87756 ·90910 ·95236 ·52659 ·55247	·86220 ·89728 ·94590 ·48661 ·51324	55 75 55 80 55 85 55 90 55 95	·84093 ·87200 ·89681 ·92262 ·95908	·81850 ·85341 ·88143 ·91073 ·95256	.79706 .83550 .86651 .89911
40 50 40 55 40 60 40 65 40 70	·62667 ·66291 ·70377 ·74650 ·79021	.58460 .62327 .66734 .71390 .76203	·54656 ·58705 ·63368 ·68344 ·73542	60 60 60 65 60 70 60 75 60 80	.76120 .78676 .81647 .84758 .87599	73003 75820 79117 82595 85791	·70082 ·73126 ·76712 ·80524 ·84048
40 75 40 80 40 85 40 90 40 95	·83145 ·86654 ·89376 ·92135 ·95892	·80792 ·84727 ·87797 ·90928 ·95239	·78547 ·82872 ·86267 ·89748 ·94593	60 85 60 90 60 95 65 65 65 70	·89913 ·92362 ·95919 ·80626 ·83016	·88406 ·91188 ·95270 ·77981 ·80643	*86944 *90039 *94629 *75472 *78379
45 45 45 50 45 55 45 60 45 65	.61665 .64267 .67477 .71207 .75201	'57399 '60162 '63601 '67635 '71993	*53553 *56434 *60048 *64328 *68993	65 75 65 80 65 85 65 90 65 95	·85651 ·88150 ·90239 ·92509 ·95939	·83597 ·86412 ·88776 ·91356 ·95292	·81625 ·84734 ·87356 ·90228 ·94653
45 70 45 75 45 80 45 85 45 90	.79364 .83348 .86770 .89440 .92160	.76583 .81018 .84857 .87870 .90957	.73954 .78795 .83015 .86347 .89781	70 70 70 75 70 80 70 85 70 90	·84789 ·86866 ·88928 ·90715 ·92722	·82626 ·84962 ·87292 ·89317 ·91600	·80554 ·83129 ·85708 ·87958 ·90501
45 95 50 50 50 55 50 60 50 65	.95895 .66380 .69095 .72370 .75986	°95242 °62423 °65345 °68899 °72856	°94596 °58806 °61893 °65677 °69921	70 95 75 75 75 80 75 85 75 90	.95965 .88386 .89974 .91405	.86678 .88477 .90104 .91999	·94688 ·85028 ·87023 ·88835 ·90950
50 70 50 75 50 80 50 85 50 90	*79863 *83645 *86940 *89535 *92201	.81350 .85049 .87978 .91004	°74551 °79158 °83227 °86468 °89833	75 95 80 80 80 85 80 90 80 95	*96014 *91120 *92206 *93499 *96078	*95380 *89779 *91015 *92491 *95452	'94753 '88473 '89853 '91501
50 95 55 55 55 60 55 65 55 70	95900 71260 73988 77118 80594	95248 •67690 •70665 •74100 •77947	·94603 ·64385 ·67566 ·71264 ·75436	85 85 85 90 85 95 90 90 90 95 95 95	93002 93978 96164 94555 96257	91926 93040 95552 93702 95660 96174	*90872 *92119 *94947 *92863 *95069

		are £1 at		oint Conting Death ac	cording to	o the	
Ages	3 %	$3\frac{1}{2}\%$	4 %	Ages	3 %	3½ %	4 %
10 10 10 20 10 30 10 40 10 50	*016 *019 *023 *030 *041	*015 *018 *022 *028 *040	*015 *017 *021 *027 *039	30 55 30 60 30 70 30 80 30 90	•054 •066 •107 •187 •340	.053 .065 .106 .186	°051 °064 °105 °184 °335
10 60 10 70 10 80 10 90 15 15	*104 *184 *338 *019	°062 °103 °183 °336 °018	.060 .101 .181 .333	35 35 35 40 35 45 35 50 35 55	•033 •036 •040 •047 •055	°032 °035 °039 °045 °054	°031 °034 °038 °044 °053
15 20	*020	*019	*019	35 60	·067	.066	°065
15 25	*022	*021	*020	35 70	·108	.107	°106
15 30	*024	*023	*022	35 80	·188	.186	°184
15 35	*027	*026	*025	35 90	·340	.338	°336
15 40	*031	*029	*028	40 40	·039	.038	°036
15 45	°036	°034	°033	40 45	·043	°042	*041
15 50	°042	°041	°040	40 50	·049	°048	*046
15 55	°051	°050	°049	40 55	·057	°056	*055
15 60	°064	°062	°061	40 60	·069	°068	*067
15 70	°105	°103	°102	40 70	·110	°108	*107
15 80	*185	°183	181	40 80	189	*188	•186
15 90	*338	°336	333	40 90	341	*339	•337
20 20	*022	°021	020	45 45	047	*046	•044
20 25	*023	°022	021	45 50	052	*051	•050
20 30	*025	°024	023	45 55	060	*059	•058
20 35	°028	*027	*026	45 60	°072	*071	*069
20 40	°032	*031	*029	45 70	°112	*111	*109
20 45	°037	*035	*034	45 80	°191	*189	*188
20 50	°043	*042	*041	45 90	°342	*340	*338
20 55	°052	*051	*050	50 50	°058	*056	*055
20 60	*065	°063	·062	50 55	*065	*064	*062
20 70	*106	°105	·103	50 60	*076	*075	*074
20 80	*186	°185	·183	50 70	*115	*114	*113
20 90	*339	°337	·335	50 80	*194	*192	*191
25 25	*025	°024	·023	50 90	*344	*342	*340
25 30	°027	*026	·025	55 55	°072	°071	*070
25 35	°029	*028	·027	55 60	°083	°081	*080
25 40	°033	*031	·030	55 70	°121	°120	*118
25 45	°037	*036	·035	55 80	°198	°197	*195
25 50	°044	*043	·041	55 90	°347	°345	*343
25 55 25 60 25 70 25 80 25 90	.053 .065 .107 .186	*052 *064 *105 *185 *337	*050 *063 *104 *183 *335	60 60 60 70 60 80 60 90 70 70	°093 °130 °206 °352 °162	°091 °128 °204 °350 °161	*090 *126 *203 *348 *159
30 30	*028	*027	*026	70 80	*234	*232	*231
30 35	*031	*030	*029	70 90	*372	*369	*366
30 40	*034	*033	*032	80 80	*299	*297	*295
30 45	*039	*038	*036	80 90	*419	*416	*414
30 50	*045	*044	*043	90 90	*471	*468	*465

For explanation see pp. (41-43).

Value of an Annuity during the Continuance of either of Two Lives according to the NORTHAMPTON TABLE

	to the NORTHAMPTON TABLE										
Ages	3 %	4 %	5 %	6 %	Ages						
15 15	24.015	20·171	17.216	14.954	15 15						
15 25	23.241	19·599	16.831	14.665	15 25						
15 35	22.444	19·043	16.435	14.368	15 35						
15 45	21.662	18·467	16.003	14.027	15 45						
15 55	20·957	17.915	15·567	13.674	15 55						
15 65	20·364	17.425	15·155	13.343	15 65						
15 75	19·945	17.058	14·837	13.069	15 75						
20 20 20 30 20 40	23·143 22·274 21·390	19.531 18.306	16·782 16·372 15·907	14.640 14.348 14.003	20 20 20 30 20 40						
20 50	20·551	17.667	15.415	13.620	20 50						
20 60	19·818	17.077	14.936	13.228	20 60						
20 70	19·223	16.568	14.498	12.852	20 70						
20 80	18·850	16.233	14.197	12.578	20 80						
25 25	22·245	18.932	16.370	14.382	25 25						
25 35	21·289	18·260	15.894	13.979	25 35						
25 45	20·342	17·561	15.368	13.569	25 45						
25 55	19·480	16·885	14.833	13.142	25 55						
25 65	18·748	16·279	14.324	12.719	25 65						
25 75	18·214	15·811	13.915	12.369	25 75						
30 30 30 40 30 50 30 60 30 70	21·255 20·202 19·198 18·321 17·613	18·249 17·488 16·724 16·018	15.889 15.333 14.745 14.172 13.653	14.004 13.592 13.133 12.665 12.218	30 30 30 40 30 50 30 60 30 70						
30 80	17·173	15.018	13·297	11.895	30 80						
35 35	20·154	17.466	15·324	13.557	35 35						
35 45	19·008	16.616	14·686	13.070	35 45						
35 55	17·957	15.792	14·035	12.547	35 55						
35 65	17·065	15.053	13·414	12.024	35 65						
35 75	16·417	14·485	12.919	11.614	35 75						
40 40	18·932	16·574	14.658	13.088	40 40						
40 50	17·694	15·627	13.929	12.520	40 50						
40 60	16·600	14·746	13.214	11.935	40 60						
40 70	15·711	13·987	12.562	11.374	40 70						
40 80	15·160	13.491	12·116	10.969	40 80						
45 45	17·608	15.576	13·898	12.463	45 45						
45 55	16·285	14.536	13·076	11.809	45 55						
45 65	15·146	13.591	12·283	11.252	45 65						
45 75	14·311	12.859	11·643	10.594	45 75						
50 50	16·158	14·447	13.016	11.804	50 50						
50 60	14·752	13·314	12.093	11.048	50 60						
50 70	13·588	12·319	11.238	10.311	50 70						
50 80	12·855	11·660	10.644	9.772	50 80						
55 55	14·619	13·223	12.029	10.965	55 55						
55 65	13·120	11.976	10·983	10·100	55 65						
55 75	11·999	10.992	10·120	9·342	55 75						
60 60	12·948	11.852	10·896	10·061	60 60						
60 70	11·372	10.500	9·735	9·058	60 70						
60 80	10·361	9.590	8·915	8·315	60 80						

Value of an Annuity during the Continuance of either of Two Lives according to the CARLISLE TABLE

			,110 011111				
Ages	3 %	Ages	3 %	Ages	3 %	Ages	3 %
5 5 5 10 5 15 5 20 5 25	27.570 27.332 26.986 26.665 26.343	15 80 15 85 15 90 15 95 20 20	22.712 22.663 22.640 22.639 25.398	35 40 35 45 35 50 35 55 35 60	21·528 20·965 20·423 19·924 19·515	55 55 55 60 55 65 55 70 55 75	15.715 14.802 14.107 13.513
5 30	26·032	20 25	24.941	35 65	19·211	55 80	12.854
5 35	25·737	20 30	24.505	35 70	18·949	55 85	12.677
5 40	25·444	20 35	24.098	35 75	18·767	55 90	12.600
5 45	25·174	20 40	23.707	35 80	18·651	55 95	12.591
5 50	24·902	20 45	23.351	35 85	18·567	60 60	13.688
5 55	24.638	20 50	23.003	35 90	18.530	60 65	12.820
5 60	24.411	20 55	22.676	35 95	18.527	60 70	12.050
5 65	24.238	20 60	22.404	40 40	20.803	60 75	11.506
5 70	24.079	20 65	22.201	40 45	20.137	60 80	11.161
5 75	23.961	20 70	22.029	40 50	19.490	60 85	10.909
5 80	23.883	20 75	21.909	40 55	18.893	60 90	10.791
5 85	23.820	20 80	21.835	40 60	18.409	60 95	10.790
5 90	23.786	20 85	21.782	40 65	18.054	65 65	11.788
5 95	23.792	20 90	21.757	40 70	17.750	65 70	10.847
10 10	27.060	20 95	21.756	40 75	17.540	65 75	10.173
10 15 10 20 10 25 10 30 10 35	26.685 26.335 25.989 25.659 25.350	25 25 25 30 25 35 25 40 25 45	24.417 23.912 23.440 22.986 22.575	40 80 40 85 40 90 40 95 45 45	17.406 17.306 17.261 17.261	65 80 65 85 65 90 65 95 70 70	9.740 9.428 9.285 9.277 9.691
10 40	25°049	25 50	22·176	45 50	18·585	70 75	8.831
10 45	24°774	25 55	21·801	45 55	17·871	70 80	8.259
10 50	24°505	25 60	21·489	45 60	17·292	70 85	7.830
10 55	24°253	25 65	21·255	45 65	16·870	70 90	7.635
10 60	24°046	25 70	21·054	45 70	16·521	70 95	7.633
10 65 10 70 10 75 10 80 10 85	23·892 23·761 23·671 23·614 23·575	25 75 25 80 25 85 25 90 25 95	20.915 20.827 20.765 20.737 20.735	45 75 45 80 45 85 45 90 45 95	16·286 16·140 16·036 15·987	75 75 75 80 75 85 75 90 75 95	7.793 7.086 6.524 6.253 6.276
10 90	23.557	30 30	23·330	50 50	17.662	80 80	6·271
10 95	23.555	30 35	22·782	50 55	16.787	80 85	5·601
15 15	26.256	30 40	22·251	50 60	16.064	80 90	5·274
15 20	25.855	30 45	21·771	50 65	15.528	80 95	5·315
15 25	25.456	30 50	21·308	50 70	15.088	85 85	4·802
15 30	25.075	30 55	20.877	50 75	14.792	85 90	4·393
15 35	24.721	30 60	20.519	50 80	14.613	85 95	4·478
15 40	24.377	30 65	20.251	50 85	14.491	90 90	3·909
15 45	24.062	30 70	20.018	50 90	14.436	90 95	4·039
15 50	23.753	30 75	19.856	50 95	14.430	95 95	4·131
15 55 15 60 15 65 15 70 15 75	23.463 23.221 23.041 22.887 22.779	30 80 30 85 30 90 30 95 35 35	19.753 19.679 19.645 19.644 22.148				

Value of	an	Annuity	during	the	Continuan	ce of	either	of Two L	ives
according to	the	INSTIT	UTE OF	FAC	CTUARIES	HEA	ALTHY	MALES	TABLE

accordi	ng to the r	LINDIIIOI	E OF ACI	OHILLD	HEALIN	I MALES	IABLE
Ages	3 %	$3\frac{1}{2}\%$	4 %	Ages	3 %	3½ %	4 %
10 10	27·2889	24.5789	22.2874	30 55	20.9234	19·3953	18.0413
10 20	26·5334	23.9943	21.8324	30 60	20.6178	19·1192	17.7915
10 30	25·8941	23.4826	21.4211	30 70	20.1964	18·7300	17.4317
10 40 10 50	25·3333 24·8647	23.0122	21.0306	30 80 30 90	19.9864	18·5311 18·4448	17·2430 17·1598
10 60	24·5176	22·2995	20·4005	35 35	22.0792	20.4161	18.9440
10 70	24·3052	22·1036	20·2197	35 40	21.4228	19.8639	18.4780
10 80	24·2049	22·0088	20·1299	35 45	20.8181	19.3458	18.0329
10 90	24·1641	21·9694	20·0919	35 50	20.2880	18.8834	17.6287
15 15	26·4501	23·9351	21·7903	35 55	19.8373	18.4834	17.2729
15 20	26.0140	23.5941	21.5221	35 60	19°4694	18·1512	16.9725
15 25	25.6252	23.2862	21.2770	35 70	18°9694	17·6898	16.5461
15 30	25.2517	22.9838	21.0315	35 80	18°7244	17·4578	16.3262
15 35	24.9047	22.6976	20.7945	35 90	18°6212	17·3581	16.2300
15 40	24.5842	22.4279	20.5668	40 40	20°6421	19·2056	17.9215
15 45	24·2893	22·1749	20·3490	40 45	19·9075	18·5755	17°3795
15 50	24·0273	21·9459	20·1484	40 50	19·2548	18·0059	16°8813
15 55	23·7995	21·7434	19·9680	40 55	18·6966	17·5105	16°4407
15 60	23·6096	21·5718	19·8126	40 60	18·2416	17·1000	16°0696
15 70	23·3470	21·3293	19·5886	40 70	17·6298	16·5357	15°5487
15 80	23·2204	21·2097	19.4753	40 80	17.3365	16·2582	15.2857
15 90	23·1708	21·1618	19.4293	40 90	17.2156	16·1415	15.1731
20 20	25·5033	23·1938	21.2067	45 45	19.0251	17·8165	16.7250
20 25	25·0419	22·8280	20.9154	45 50	18.2213	17·1139	16.1095
20 30	24·5950	22·4663	20.6214	45 55	17.5210	16·4919	15.5558
20 35 20 40 20 45 20 50 20 55	24.1786 23.7947 23.4424 23.1296 22.8572	22·1228 21·7998 21·4974 21·2240 20·9815	20°3371 20°0644 19°5645 19°3483	45 60 45 70 45 80 45 90 50 50	16.9439 16.1649 15.7934 15.6417 17.2498	15.9710 15.2526 14.9012 14.7547 16.2625	15.0848 14.4216 14.0888 13.9474 15.3617
20 60	22.6281	20.7744	19·1606	50 55	16·3792	15.4878	14.6708
20 70	22.3046	20.4752	18·8837	50 60	15·6458	14.8251	14.0710
20 80	22.1391	20.3184	18·7349	50 70	14·6380	13.8953	13.2123
20 90	22.0671	20.2489	18·6678	50 80	14·1548	13.4382	12.7794
25 25	24.5055	22.4023	20·5759	50 90	13·9586	13.2488	12.5966
25 30 25 35 25 40 25 45 25 50	23.9792 23.4860 23.0319 22.6184 22.2555	21.9760 21.5694 21.1877 20.8335 20.5165	20°2295 19°8930 19°5713 19°2667 18°9892	55 55 55 60 55 70 55 80 55 90	15·3200 14·3987 13·0876 12·4415 12·1769	14.5424 13.7083 12.4972 11.8858 11.6304	13.8254 13.0689 11.3699 11.1234
25 55 25 60 25 70 25 80 25 90	21.9431 21.6836 21.3218 21.1403 21.0633	20·2388 20·0042 19·6699 19·4980 19·4236	18.7418 18.5293 18.2203 18.0572 17.9854	60 60 60 70 60 80 60 90 70 70	13.2730 11.5911 10.3534 9.0904	12.6860 11.1295 10.3051 9.9505 8.8028	12.1393 10.6972 9.9157 9.5732 8.5300
30 30	23·3614	21.4751	19.8219	70 80	7.5975	7·3845	7·1814
30 35	22·7735	20.9900	19.4200	70 90	6.8975	6·7079	6·5273
30 40	22·2274	20.5310	19.0332	80 80	5.4360	5·3219	5·2117
30 45	21·7296	20.1046	18.6669	80 90	4.2504	4·1733	4·0986
30 50	21·2947	19.7251	18.3349	90 90	2.6105	2·5809	2·5521

Single Payment to secure £1 at the Death of the Last of Two Lives according to the NORTHAMPTON TABLE

Ages	3%	Ages	3 %	Ages	3 %
20 20	*2968	15 15	•2693	35 55	*4479
21 21	*3019	15 20	•2824	35 60	*4615
22 22	*3070	15 25	•2939	35 65	*4738
23 23	·3122	15 30	*3055	35 70	·4844
24 24		15 35	*3172	35 75	·492 7
25 25	*3230	15 40	*3288	35 80	°4986
26 26	*3285	15 45	*3399	40 45	°4378
27 27	*3341	15 50	*3506	40 50	°4555
28 28	*3399	15 55	*3605	40 55	°4720
29 29	*3458	15 60	*3696	40 60	°4874
30 30	*3518	15 65	*3777	40 65	·5013
31 31	*3580	15 70	*3846	40 70	·5133
32 32	*3642	15 75	*3899	40 75	·5226
33 33	*3707	15 80	*3937	40 80	·5293
34 34	*3772	20 25	*3094	45 50	·4779
35 35 36 36 37 37 38 38 39 39	*3839 *3907 *3977 *4048 *4121	20 30 20 35 20 40 20 45 20 50	*3350 *3479 *3603 *3723	45 55 45 60 45 65 45 70 45 75	*4965 *5139 *5297 *5434 *5540
40 40	*4195	20 55	*3833	45 80	•561 7
41 41	*4270	20 60	*3936	50 55	•5213
42 42	*4346	20 65	*4029	50 60	•5412
43 43	*4422	20 70	*4110	50 65	•5593
44 44	*4501	20 75	*4173	50 70	•5751
45 45	°4580	20 80	*4218	50 75	•5875
46 46	°4662	25 30	*3368	50 80	•5964
47 47	°4745	25 35	*3508	55 60	•5678
48 48	°4829	25 40	*3648	55 65	•5887
49 49	°4916	25 45	*3784	55 70	•6070
50 50	*5003	25 50	°3914	55 75	·6214
51 51	*5090	25 55	°4°35	55 80	·6318
52 52	*5178	25 60	°4147	60 65	·6181
53 53	*5267	25 65	°4248	60 70	·6396
54 54	*5358	25 70	°4335	60 75	·6567
55 55	*5451	25 75	'4403	60 80	·6691
56 56	*5545	25 80	'4453	65 70	·6721
57 57	*5641	30 35	'3671	65 75	·6928
58 58	*5738	30 40	'3825	65 80	·7081
59 59	*5837	30 45	'3974	70 70	·7027
60 60	*5937	30 50	°4117	70 75	•7281
61 61	*6039	30 55	°4250	70 80	•7474
62 62	*6142	30 60	°4372	75 75	•7587
63 63	*6248	30 65	°4483	75 80	•7829
64 64	*6355	30 70	°4579	80 80	•8124
65 65	•6465	30 75	*4653	80 85	·8323
66 66	•6575	30 80	*4707	80 90	·8451
67 67	•6687	35 40	*4008	85 85	·8564
68 68	•6800	35 45	*4172	85 90	·8736
69 69	•6913	35 50	*4332	90 90	·8937

Single Payment to secure £1 at the Death of the Last of Two Lives according to the CARLISLE TABLE

	to the CARLISLE TABLE										
Ages	3 %	Ages	3 %	Ages	3 %						
15 15 15 20 15 25 15 30 15 35	*2061 *2178 *2294 *2405 *2508	30 40 30 45 30 50 30 55 30 60	*3228 *3368 *3503 *3628 *3732	50 60 50 65 50 70 50 75 50 80	.5030 .5186 .5314 .5400						
15 40	·2609	30 65	·3810	50 85	·5488						
15 45	·2700	30 70	·3878	50 90	·5504						
15 50	·2790	30 75	·3926	50 95	·5506						
15 55	·2875	30 80	·3955	55 55	·5132						
15 60	·2945	30 85	·3977	55 60	·5398						
15 65	*2998	-30 90	3987	55 65	*5600						
15 70	*3°43	30 95	3987	55 70	*5773						
15 75	*3°74	35 35	3258	55 75	*5891						
15 80	*3°94	35 40	3439	55 80	*5965						
15 85	*31°8	35 45	3602	55 85	*6016						
15 90	·3115	35 50	·3760	55 90	·6039						
15 95	·3115	35 55	·3906	55 95	·6041						
20 20	·2311	35 60	·4025	60 60	·5722						
20 25	·2444	35 65	·4113	60 65	·5975						
20 30	·2571	35 70	·4190	60 70	·6199						
20 35	*2690	35 75	*4243	60 75	•6358						
20 40	*2804	35 80	*4276	60 80	•6458						
20 45	*2908	35 85	*4301	60 85	•6531						
20 50	*3009	35 90	*4312	60 90	•6566						
20 55	*3104	35 95	*4313	60 95	•6566						
20 60	'3183	40 40	·3650	65 65	·6275						
20 65	'3242	40 45	·3844	65 70	·6550						
20 70	'3293	40 50	·4032	65 75	·6746						
20 75	'3328	40 55	·4206	65 80	·6872						
20 80	'3349	40 60	·4347	65 85	·6963						
20 85	°3364	40 65	*4450	65 90	*7004						
20 90	°3372	40 70	*4539	65 95	*7007						
20 95	°3372	40 75	*4600	70 70	*6886						
25 25	°2597	40 80	*4639	70 75	*7137						
25 30	°2744	40 85	*4668	70 80	*7303						
25 35	·2882	40 90	*4681	70 85	*7428						
25 40	·3014	40 95	*4681	70 90	*7485						
25 45	·3134	45 45	*4071	70 95	*7486						
25 50	·3250	45 50	*4296	75 75	*7439						
25 55	·3359	45 55	*4504	75 80	*7645						
25 60	°3450	45 60	•4672	75 85	•7809						
25 65	°3518	45 65	•4795	75 90	•7887						
25 70	°3577	45 70	•4897	75 95	•7881						
25 75	°3617	45 75	•4965	80 80	•7882						
25 80	°3643	45 80	•5008	80 85	•8077						
25 85	*3661	45 85	°5038	80 90	·8173						
25 90	*3669	45 90	°5052	80 95	·8161						
25 95	*3669	45 95	°5052	85 85	·8310						
30 30	*2914	50 50	°4564	85 90	·8429						
30 35	*3073	50 55	°4819	85 95	·8405						

Single Payment to secure £1 at the Death of the Last of Two Lives according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	$3\frac{1}{2}\%$	4 %	Ages	3 %	3½%	4 %
10 10 10 20 10 30 10 40 10 50	1761 1981 2167 2330	1350 1548 1721 1879 2016	*1043 *1218 *1376 *1527 *1662	30 55 30 60 30 70 30 80 30 90	°3615 °37°3 °3826 °3888 °3914	*3103 *3196 *3328 *3395 *3424	·2676 ·2773 ·2911 ·2983 ·3015
10 60 10 70 10 80 10 90 15 15	•2568 •2630 •2659 •2671 •2005	'2121 '2187 '2219 '2233 '1568	1769 1838 1873 1888	35 35 35 40 35 45 35 50 35 55	'3278 '3469 '3645 '3800 '3931	·2758 ·2945 ·3120 ·3276 ·3411	·2329 ·2508 ·2680 ·2835 ·2972
15 20	·2132	1683	1338	35 60	'4038	*3524	'3088
15 25	·2245	1787	1432	35 70	'4184	*3680	'3252
15 30	·2354	1890	1526	35 80	'4255	*3758	'3336
15 35	·2455	1986	1618	35 90	'4285	*3793	'3373
15 40	·2548	2088	1705	40 40	'3697	*3167	'2723
15 45 15 50 15 55 15 60 15 70	·2634 ·2711 ·2777 ·2832 ·2909	·2163 ·2241 ·2309 ·2367 ·2449	1789 1866 1935 1995	40 45 40 50 40 55 40 60 40 70	*3911 *4101 *4263 *4396 *4574	·3380 ·3573 ·3740 ·3879 ·4070	'2931 '3123 '3292 '3435 '3635
15 80	°2946	°2489	'2125	40 80	'4659	*4164	3736
15 90	°2960	°2506	'2143	40 90	'4694	*4203	3780
20 20	°2281	°1819	'1459	45 45	'4167	*3637	3183
20 25	°2515	°1942	'1571	45 50	'4402	*3875	3419
20 30	°2545	°2064	'1684	45 55	'4606	*4085	3632
20 35	·2666	°2181	'1794	45 60	'4774	'4261	3814
20 40	·2778	°2290	'1898	45 70	'5001	'4504	4069
20 45	·2881	°2392	'1998	45 80	'5109	'4623	4197
20 50	·2972	°2485	'2091	45 90	'5153	'4672	4251
20 55	·3051	°2567	'2174	50 50	'4685	'4162	3707
20 60	·3118	·2637	*2246	50 55	'4938	*4424	3973
20 70	·3212	·2738	*2352	50 60	'5152	*4648	4203
20 80	·3260	·2791	*2410	50 70	'5445	*4963	4534
20 90	·3281	·2814	*2435	50 80	'5586	*5211	4700
25 25	·2571	·2086	*1702	50 90	'5643	*5182	4771
25 30 25 35 25 40 25 45 25 50	*2725 *2868 *3000 *3121 *3227	·2230 ·2368 ·2497 ·2617 ·2724	1835 1964 2088 2205	55 55 55 60 55 70 55 80 55 90	'5247 '5515 '5897 '6085 '6162	*4744 *5026 *5436 *5642 *5729	'4298 '4589 .5020 '5242 '5337
25 55	·3318	·2818	*2407	60 60	*5843	·5372	°4946
25 60	·3393	·2897	*2489	60 70	*6333	·5898	°5501
25 70	·3498	·3010	*2608	60 80	*6586	·6177	°5802
25 80	·3551	·3068	*2670	60 90	*6693	·6297	°5933
25 90	·3574	·3093	*2698	70 70	*7061	·6685	°6335
30 30	·2905	*2400	°1991	70 80	.7496	·7165	·6853
30 35	·3076	*2564	°2146	70 90	.7700	·7393	·7105
30 40	·3235	*2719	°2295	80 80	.8125	·7862	·7611
30 45	·3380	*2863	°2436	80 90	.8471	·8251	·8039
30 50	·3506	*2992	°2564	90 90	.8948	·8789	·8634

Annual Payment during the Continuance of either of Two Lives to secure £1 at the Last Death according to the

INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	3½ %	4 %	Ages	3 %	31 %	4 %
10 10	*0062	.0053	*0045.	30 55	.0162	'0152	.0141
10 20	.0072	.0062	.0053	30 60	.0171	·0159	·0148
10 30	.0081	10070	.0001	30 70	.0181	.0169	.0128
10 40	*0088	.0078	.0069	30 80	.0182	.0174	·0164
10 50	*0095	.0082	.0077	30 90	.0182	·0176	.0166
10 60	.0101	.0001	.0083	35 35	*0142	*0129	·0117
10 70	*0104	.0092	.0082	35 40	.0122	.0141	.0129
10 80	.0102	*0096	·0089	35 45	·0167	.0123	.0141
10 90	,0100	.0097	.0090	35 50	.0178	.0162	·0152
15 15	.0073	'0063	'0054	35 55	.0189	.0172	.0193
15 20	.0079	.0068	*0059	35 60	.0192	*0184	.0172
15 25	.0084	.0074	*0064	35 70	*0209	.0192	·0185
15 30	*0090	'0079	.0069	35 80	.0216	*0204	.0193
15 35	.0095	*0084	*0074	35 90	.0218	*0207	.0196
15 40	.0100	.0089	'0079	40 40	.0171	.0157	.0144
15 45	.0104	,0003	*0084	40 45	.0182	.0173	.0190
15 50	.0108	.0098	*0088	40 50	.0203	.0188	.0172
15 55	'0112	'0102	'0092	40 55	.0216	'0202	.0189
15 60	.0112	.0102	.0096	40 60	*0228	'0214	'0201
15 70	'0120	.0110	.0101	40 70	°0246	*0232	'0220
15 80	'0122	'0112	*0104	40 80	*0254	'0241	'0229
15 90	'0122	.0113	.0102	40 90	*0258	'0245	°0234
20 20	*0086	*0075 *0082	.0066	45 45	*0208	.0193	.0180
20 25	*0093	*0088	*0072 *0078	45 50	*0229	'0214	*0200
	.0106			45 55	·0249	.0234	.0219
20 35	'0112	'0094 '0100	*0084 *0090	45 60	·0266	'0251	.0237
20 40 20 45	.0118	.0109	*0096	45 70 45 80	°029I	'0277	*0264
20 50	.0123	'0112	*0102	45 80 45 90	°0304 °0310	*0291 *0297	·0278 ·0284
20 55	.0128	.0112	.0102	50 50	0310	'0241	0204
20 60	'0132	'0121	.0111	50 55	.0284	.0268	0254
20 70	.0138	0127	.0118	50 60	.0310	'0294	*0279
20 80	.0141	.0131	'0122	50 70	.0348	.0333	.0319
20 90	0142	'0132	.0124	50 80	.0369	. 0354	'0341
25 25	1010.	.0089	· 0 079	50 90	.0377	.0364	·0351
25 30	.0100	*0097	10086	55 55	0322	.0305	10290
25 35	.0112	.0102	*0094	55 60	·0358	.0342	.0326
25 40	.0125	.0113	.0101	55 70	.0419	.0403	·0388
25 45	.0132	'0120	.0100	55 80	.0453	.0438	.0424
25 50	.0139	.0122	.0119	55 90	.0468	.0454	.0440
25 55	.0145	.0133	'0122	60 60	°0409	.0393	.0376
25 60	.0120	.0138	.0127	60 70	.0203	°0486	.0470
25 70	.0122	·0146	.0136	60 80	.0562	.0546	.0532
25 80	.0160	.0120	.0140	60 90	.0590	·0575	.0261
25 90	.0162	*0152	.0142	70 70	.0700	·0682	.0665
30 30	.0110	.0102	•0096	70 80	.0872	.0855	·0838
30 35	.0129	.0117	.0102	70 90	.0975	.0959	·0944
30 40	'0139	.0126	.0112	80 80	1262	°1244	1225
30 45	·0149	0136	·0124	80 90	1613	.1595	1577
30 50	.0122	·0144	.0133	90 90	.2478	*2454	. 2431

Value of the Reversion to a Perpetuity on the Death of the FIRST of Two Lives

	NO	RTHAMPT	'ON	HE.	ALES		
Ages	3 %	4 %	5 %	3 %	$3\frac{1}{2}\%$	4 %	Ages
15 15 20 20 25 25 30 30 35 35	18·113 19·200 19·950 20·744 21·611	11.589 12.465 13.056 13.687 14.388	8.036 8.768 9.236 9.745 10.320	13·467 14·752 15·763 16·960 18·238	10·208 11·316 12·176 13·215 14·338	7.957 8.919 9.654 10.560	15 15 20 20 25 25 30 30 35 35
40 40 45 45 50 50 55 55 60 60	22.569 23.557 24.619 25.652 26.727	15·180 16·010 16·919 17·821 18·774	10.984 11.688 12.478 13.265 14.112	19.623 21.171 22.791 24.466 26.134	15.572 16.974 18.459 20.017 21.588	12.652 13.924 15.290 16.740 18.221	40 40 45 45 50 50 55 55 60 60
65 65 70 70 75 75 80 80 85 85	27.862 29.072 30.219 31.211 32.024	19.799 20.913 21.985 22.932 23.661	15.040 16.070 17.083 17.982 18.744	27.681 29.111 30.346 31.285 31.931	23.060 24.434 25.632 26.549 27.184	19.623 20.944 22.107 23.003 23.627	65 65 70 70 75 75 80 80 85 85

Value of the Reversion to a Perpetuity on the Death of the LAST of Two Lives

	NO	RTHAMP	ron	HE	ALES		
Ages	3 %	4 %	5 %	3 %	3½ %	4 %	Ages
15 15 20 20 25 25 30 30 35 35	9.318 10.190 11.088 12.078 13.179	4·829 5·469 6·068 6·751 7·534	2·784 3·218 3·630 4·111 4·676	6.883 7.830 8.828 9.972	4.636 5.378 6.169 7.096 8.155	3.210 3.793 4.424 5.178 6.056	15 15 20 20 25 25 30 30 35 35
40 40 45 45 50 50 55 55 60 60	14·401 15·725 17·175 18·714 20·385	8·426 9·424 10·553 11·777 13·148	5.342 6.102 6.984 7.971 9.104	12.691 14.308 16.084 18.013 20.060	9·366 10·755 12·309 14·029 15·885	7.078 8.275 9.638 11.175 12.861	40 40 45 45 50 50 55 55 60 60
65 65 70 70 75 75 80 80 85 85	22·196 24·126 26·049 27·893 29·402	14.639 16.365 18.053 19.782 21.253	10.408 11.884 13.429 14.988 16.314	22·149 24·243 26·198 27·897 29·258	17.810 19.769 21.622 23.250 24.564	14.637 16.470 18.228 19.788 21.058	65 65 70 70 75 75 80 80 85 85

Value of an Annuity during the Life of y after the Death of x

A rea of	Age of	NORTHAMPTON	CARLISLE	HEALTHY MALES			
Age of x	Age of y	3 %	3 %	3 %	$3\frac{1}{2}\%$	4 %	
45 45 45 45 45	20 25 30 35 40	7.271 6.650 5.998 5.315 4.612	7·4 ⁸ 7 6·711 5·906 5·102 4·275	7·849 7·025 6·136 5·225 4·314	6·790 6·126 5·397 4·639 3·868	5.904 5.366 4.766 4.132 3.479	
60 60 60 60	20 30 35 40 50	10°042 8°544 7°711 6°822 4°975	11.912 10.027 9.023 7.919 5.574	12·392 10·382 9·233 8·006 5·410	10·940 9·284 8·316 7·265 4·990	9.702 8.332 7.513 6.611 4.612	
75 75 75 75 75	30 40 50 60 70	12·157 10·191 7·964 5·588 3·135	14·343 12·028 9·281 5·993 3·319	15.008 12.389 9.281 6.003 3.147	13.665 11.422 8.672 5.688 3.023	12·486 10·557 8·117 5·395 2·906	

Value of an Annuity during the Life of y, who is to be nominated at the Death of x

	Age of	NORTHAMPTON	CARLISLE	I	HEALTHY MALE	S
Age of	y at Death of x	3 %	3 %	3 %	3½ %	4 %
45 45 45 45 45	10 25 30 35 40	12·393 10·763 10·253 9·690 9·066	12°473 11°024 10°460 9°888 9°232	12.994 11.387 10.782 10.120 9.391	10·762 9·564 9·103 8·591 8·018	8·998 8·094 7·740 7·341 6·888
60 60 60 60	10 30 35 40 50	14·863 12·296 11·621 10·873 9·218	16·308 13·676 12·929 12·071 10·181	16.918 14.038 13.177 12.228 10.021	14.544 12.302 11.610 10.836 8.989	12·598 10·837 10·279 9·644 8·091
75 75 75 75 75	10 30 50 60 70	17.751 14.685 11.010 8.831 6.338	19·863 16·657 12·400 9·311 6·582	20.708 17.183 12.266 9.252 6.305	18·340 15·512 11·335 8·657 5·968	16·348 14·063 10·499 8·113 5·657

For explanation see p. (45)

Single Payment to secure £1 at the Death of x provided he dies before y, according to the NORTHAMPTON TABLE

Ages	3 %	Ages	3 %	Ages	3 %
x y 15 15 20 10 20 20 25 15 25 25	•26366 •30838 •27962 •31846 •29054	x y 50 20 50 30 50 40 50 50 55 15	*47767 *45221 *41378 *35853 *53896	x y 65 35 65 40 65 45 65 50 65 55	·59587 ·57855 ·55766 ·53073 ·49904
30 10	*36038	55 25	·51226	65 60	`45822
30 20	*32987	55 35	·48319	65 65	`40576
30 30	*30210	55 45	·43830	70 10	`71527
35 15	*37643	55 55	·37357	70 15	`70284
35 25	*34755	60 10	·60306	70 20	`68822
35 35	*31472	60 20	*57287	70 25	•68087
40 10	*42717	60 30	*55136	70 30	•67236
40 20	*39579	60 40	*51734	70 35	•66139
40 30	*36815	60 50	*46567	70 40	•64650
40 40	*32868	60 60	*38923	70 45	•62843
45 15	*45°53	65 10	*65695	70 50	·60461
45 25	*422°08	65 15	*64308	70 55	·57691
45 35	*3898°0	65 20	*62784	70 60	·54027
45 45	*343°06	65 25	*61920	70 65	·49029
50 10	*5°0891	65 30	*60899	70 70	·42338

Single Payment to secure £1 at the Death of x provided he dies before y, according to the CARLISLE TABLE

Ages	3 %	Ages	3 %	Ages	3 %
x y 15 15 20 10 20 20 25 15 25 25	*2101 *2503 *2234 *2705 *2391	x y 50 20 50 30 50 40 50 50 55 15	*4681 *4400 *3965 *3260 *5409	65 35 65 40 65 45 65 50 65 55	·6236 ·6088 ·5940 ·5644 ·5137
30 10	*3190	55 25	*5211	65 60	*4534
30 20	*2928	55 35	*4931	65 65	*3973
30 30	*2556	55 45	*4454	70 10	*7276
35 15	*3427	55 55	*3528	70 15	*7205
35 25	*3136	60 10	*6147	70 20	*7161
35 35	·2710	60 20	•5986	70 25	•7082
40 10	·3959	60 30	•5766	70 30	•6986
40 20	·3733	60 40	•5472	70 35	•6908
40 30	·3388	60 50	•4917	70 40	•6788
40 40	·2891	60 60	•3792	70 45	•6692
45 15	•4262	65 10	·6673	70 50	·6475
45 25	•4018	65 15	·6592	70 55	·6034
45 35	•3636	65 20	·653 I	70 60	·5464
45 45	•3052	65 25	·6439	70 65	·4956
50 10	•4880	65 30	·6332	70 70	·4190

For explanation see p. (46).

Single Payment to secure $\pounds 1$ at the Death of x provided he dies before y, according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	31 %	4%	Ages	3 %	$\left 3\frac{1}{2}\%\right $	4 %
x y 15 15 15 25 15 35 15 45 15 55	°1961 °1638 °1318 °1014 °0730	·1726 ·1467 ·1204 ·0944 ·0690	1530 1322 1105 0882	x y 45 15 45 20 45 25 45 30 45 35	*4483 *4343 *4211 *4022 *3778	*4091 *3969 *3856 *3693 *3480	°3746 °3638 °3540 °3399 °3213
15 70	.0359	°0347	·0336	45 40	'3466	·3207	*2975
20 15	.2326	°2101	·1831	45 45	'3083	·2870	*2678
20 20	.2148	°1913	·1715	45 55	'2217	·2094	*1982
20 30	.1785	°1619	·1475	45 70	'1068	·1033	*1000
20 40	.1412	°1306	·1212	50 15	'5045	·4655	*4307
20 50	·1061	°0999	°0943	50 20	'4917	°4541	'4205
20 60	·0744	°0713	°0683	50 25	'4808	°4445	'4120
20 70	·0476	°0461	°0447	50 30	'4647	°4303	'3995
25 15	·2662	°2358	°2101	50 35	'4433	°4115	'3828
25 20	·2482	°2209	°1979	50 40	'4146	°3861	'3603
25 25	·2296	·2059	·1857	50 45	°3769	'3524	'3302
25 35	·1860	·1697	·1556	50 50	°3319	'3121	'2940
25 45	·1416	·1318	·1231	50 60	°2303	'2196	'2097
25 55	·1011	·0959	·0911	50 70	°1388	'1342	'1300
25 70	·0520	·0504	·0489	55 15	°5643	'5268	'4925
30 15	·3057	·2720	°2434	55 20	°5524	.5160	*4828
30 20	·2881	·2574	°2312	55 25	°5439	.5082	*4758
30 25	·2697	·2422	°2187	55 30	°5304	.4961	*4649
30 30	·2470	·2234	°2031	55 35	°5124	.4800	*4505
30 40	·1955	·1799	°1662	55 40	°4877	.4579	*4305
30 50	°1430	·1342	·1262	55 45	°4531	*4266	'4023
30 60	°0970	·0927	·0886	55 50	°4092	*3868	'3661
30 70	°0603	·0585	·0567	55 55	°3563	*3384	'3219
35 15	°3486	·3123	·2811	55 70	°1850	*1790	'1734
35 20	°3321	·2983	·2693	60 15	°6264	*5911	'5588
35 25	·3148	·2841	·2573	60 20	.6154	.5809	*5493
35 30	·2922	·2650	·2412	60 25	.6086	.5747	*5436
35 35	·2656	·2424	·2221	60 30	.5976	.5647	*5345
35 45	·2039	·1892	·1762	60 35	.5832	.5516	*5226
35 55	·1426	·1349	·1277	60 40	.5630	.5331	*5057
35 70	·0705	·0683	*0662	60 45	.5332	·5060	*4808
40 15	·3956	·3574	*3243	60 50	.4934	·4694	*4471
40 20	·3804	·3443	*3129	60 60	.3806	·3650	*3504
40 25	·3651	·3314	*3019	60 70	.2484	·2409	*2336
40 30	·3438	·3132	*2864	70 20	.7370	·7098	*6840
40 35	·3174	·2905	·2669	70 30	.7263	.6995	·6744
40 40	·2858	·2633	·2433	70 40	.7058	.6803	·6563
40 50	·2121	·1986	·1863	70 50	.6598	.6371	·6155
40 60	·1408	·1342	·1280	70 60	.5681	.5503	·5335
40 70	·0844	·0817	·0791	70 70	.4239	.4131	·4028

For explanation see p. (46).

MORTALITY TABLES-THREE LIVES

Value of an Annuity for the Joint Continuance of Three Lives of Equal Ages according to the NORTHAMPTON TABLE

Ages	4 %	Ages	4 %	Ages	4 %
10 10 10	12.200	30 30 30	9.221	50 50 50	6.317
II II II	12.043	31 31 31	9.099	51 51 51	6.191
12 12 12	11.865	32 32 32	8.975	52 52 52	6.011
13 13 13	11.678	33 33 33	8.848	53 53 53	5.859
14 14 14	11.481	34 34 34	8.718	54 54 54	5.705
15 15 15	11.274	35 35 35	8.585	55 55 55	5.220
16 16 16	11.056	36 36 36	8.448	56 56 56	5.393
17 17 17	10.845	37 37 37	8.309	57 57 57	5.235
18 18 18	10.656	38 38 38	8.165	58 58 58	5.076
19 19 19	10.490	39 39 39	8.017	59 59 59	4.916
20 20 20	10.342	40 40 40	7.865	60 60 60	4.755
21 21 21	10.222	41 41 41	7.714	61 61 61	4.593
22 22 22	10.118	42 42 42	7.567	62 62 62	4.432
23 23 23	10.015	43 43 43	7.423	63 63 63	4.263
24 24 24	9.905	44 44 44	7.276	65 65 65	3.914
25 25 25	9.796	45 45 45	7.126	70 70 70	2.995
26 26 26	9.685	46 46 46	6.972	75 75 75	2.119
27 27 27	9.572	47 47 47	6.813	80 80 80	1 '400
28 28 28	9.457	48 48 48	6.650	85 85 85	.782
29 29 29	9.340	49 49 49	6.482	90 90 90	•563

Value of an Annuity for the Joint Continuance of Three Lives according to the CARLISLE TABLE

Ages	3 %	Ages	3 %	Ages	3 %
0 25 30	8.460	25 50 55	7.959	50 75 80	2.499
1 26 31	9.684	26 51 56	7.689	51 76 81	2.349
2 27 32	10.257	27 52 57	7.411	52 77 82	2.220
3 28 33	10.726	28 53 58	7.133	53 78 83	2.086
4 29 34	10.930	29 54 59	6.870	54 79 84	1.942
5 30 35	11.056	30 55 60	6.626	55 80 85	1.796
6 31 36	11.063	31 56 61	6.405	56 81 86	1.652
7 32 37	11.000	32 57 62	6.183	57 82 87	1.230
8 33 38	10.010	33 58 63	5 959	58 83 88	1.437
9 34 39	10.780	34 59 64	5.734	59 84 89	1.334
10 35 40	10.632	35 60 65	5.219	60 85 90	1.184
11 36 41	10.479	36 61 66	5.318	61 86 91	1.100
12 37 42	10.331	37 62 67	5.115	62 87 92	1.092
13 38 43	10.185	38 63 68	4.900	63 88 93	1.112
14 39 44	10.029	39 64 69	4.673	64 89 94	1.111
15 40 45	9.877	40 65 70	4'439	65 90 95	1.064
16 41 46	9.732	41 66 71	4.192	66 91 96	1.022
17 42 47	9.288	42 67 72	3.953	67 92 97	1.020
18 43 48	9.438	43 68 73	3.729	68 93 98	1.100
19 44 49	9.270	44 69 74	3.20	69 94 99	1.081
20 45 50	9.088	45 70 75	3.336	70 95 100	•946
21 46 51	8.887	46 71 76	3.142	71 96 101	.756
22 47 52	8.676	47 72 77	2.971	72 97 102	•509
23 48 53	8.454	48 73 78	2.806	73 98 103	. 230
24 49 54	8.215	49 74 79	2.637	1	

For explanation see p. (47).

MORTALITY TABLES—THREE LIVES

Value of an Annuity for the Joint Continuance of Three Lives of Equal Ages according to the INSTITUTE OF ACTUARIES HEALTHY MALES TABLE

Ages	3 %	$ 3\frac{1}{2} \% $	4 %	Ages	3 %	$ 3\frac{1}{2}\% $	4 %
0	11.234	10.633	9.850	50	8.621	8.320	8.036
I	16.013	14.760	13.669	51	8.312	8.030	7.764
2	17.358	16.004	14.824	52	8.004	7.740	7.492
3	18.100	16.696	15.470	53	7.696	7.451	7.219
4	18.534	17:107	15.859	54	7.389	7.161	6.945
5	18.833	17.393	16.134	55	7.085	6.873	6.673
	19.006	17.567	16.302	56	6.783	6.587	6.401
7 8	19.072	17.642	16.386	57	6.483	6.303	6.131
	19.046	17.633	16.391	58	6.187	6.031	5.862
9	18.946	17.555	16.332	59	5.895	5.742	5.597
10	18.787	17:424	16.555	60	5.607	5.468	5.334
II	18.589	17.257	16.079	61	5.322	5.192	5.075
12	18.361	17.060	15.910	62	5.048	4.931	4.820
13	18,110	16.843	15.720	63	4.777	4.671	4.269
14	17.846	16.612	15.218	64	4.212	4.416	4.354
15	17.572	16.372	15.302	65	4.254	4.167	4.084
16	17.300	16.132	15.093	66	4.004	3.925	3.850
17	17.030	15.895	14.884	67	3.760	3.690	3.622
	16.773	15.669	14.683	68	3.25	3.462	3.401
19	16.526	15.452	14.492	69	3*297	3.541	3.186
20	16.293	15.248	14.312	70	3.048	3.028	2.979
21	16.073	15.055	14.142	71	2.868	2.823	2.779
22	15.861	14.870	13.979	72	2.665	2.626	2.287
23	15.656	14.691	13.823	73	2.472	2.437	2.402
24	15.453	14.214	13.668	74	2.287	2.256	2.226
25	15.251	14.337	13.213	75	2.111	2.083	2.057
26	15.046	14.159	13.356	76	1.943	1.010	1.896
27	14.837	13.976	13.194	77 78	1.784	1.764	1.743
	14.623	13.787	13.028		1.634	1.616	1.598
29	14.404	13.293	12.857	79	1.492	1.476	1.460
30	14.179	13.394	12.681	80 81	1.358	1.344	1.331
31	13.947	13.189	12.497	82	1.535	I '220	1.508
32	13.467	12.761	12:309		1.114	1.104	1.004
33	13.518	12.238	12.114	83 84	1.004	*995	'987
34			11.914	85	·806	*894	*886
35 36	12.964 12.704	12:309		86		'799	.793
37	12'439	12.075	11.497	87	717	'711	•706
38	12.167	11.230	11.057	88	·635 ·559	.630	.626
39	11.892	11.339	10.829	89	·490	*555 *486	°551 °483
40	11.612	11.084	10.29	90	*425		
41	11.327	10.824			, ,	*423	'420
42	11.037	10.224	10.328	91 92	*368 *317	*366	•363
43	10.746	10.331	9.868	92	266	°315	·313
44	10.449	10.018	9.616	93	•226	*225	*224
45	10.120	9.742	9.360	95	.187	.186	185
46	9.847	9.462	9.101	95	157	1	
47	9.543	9.180	8.839	97	°146	·157	·156
48	9.237	8.895	8.573	98	112	143	145
49	8.930	8.608	8.305	99	.087	.086	•086
17	,,,			100	.012	.012	*015

For explanation see p. (47).

Value of an Annuity during the Longest of Three Lives according to the NORTHAMPTON TABLE

Ages	3 %	4 %	Ages	3 %	4 %				
10 10 10	26.642	21.938	20 40 40	22.762	19:259				
10 10 30	25.812	21.400	20 40 60	21.697	18·582 18·741				
10 10 50	25.340	20.835	20 45 45 20 45 65	21.153	18.134				
10 10 70 10 20 20	25·707	21.263	20 50 50	21.396	18.380				
10 20 40	24.645	20.606	20 50 70	20.594	17.704				
10 20 40	24.292	20.333	20 55 55	20.948	18.013				
10 25 25	25.077	20.944	20 55 75	20.273	17.350				
10 25 45	24.401	20.491	20 60 60	20.491	17.671				
10 25 65	23.905	20.077	20 65 65	19.983	17.242				
10 30 30	24.785	20.635	20 70 70	19.606	16.916				
10 30 50	23.780	20°021 19°746	30 30 30 30 30 50	23.266	19.625				
10 30 70	23°472 24°217	20.380	30 30 70	21.376	18.357				
10 35 35 10 35 55	23.521	19.628	30 35 35	22.485	19.250				
10 35 75	23.029	19.426	30 35 55	21.141	18.233				
10 40 40	23.746	19.851	30 35 75	20.713	17.887				
10 40 60	22.878	19.351	30 40 40	21.814	18.628				
10 45 45	23.571	19.495	30 40 60	20.570	17·815 18·241				
10 45 65	22.462	19.035	30 45 45	19.902	17.298				
10 50 50	22.647	19.202	30 45 65 30 50 50	20.227	17.585				
10 50 70	22.028	18.958	30 50 70	19.267	16.783				
10 55 75	21.768	18.484	30 55 55	19.670	17.164				
10 60 60	22.004	18.705	30 55 75	18.651	16.263				
10 65 65	21.464	18.225	30 60 60	19.107	16.708				
10 70 70	21.308	18.110	30 65 65	18.251	15.971				
15 25 25	24.773	20.776	30 70 70	18.045	15·805 17·996				
15 25 45	23.932	20.192	40 40 40 40 40 60	19.414	16.997				
15 25 65	23.375	20.078	40 45 45	20.011	17.501				
15 35 35 15 35 55	23 / 30	19.263	40 45 65	18.601	16.364				
15 35 75	22.407	19.007	40 50 50	19.020	16.431				
15 45 45	22.681	19.114	40 50 70	17.817	15.736				
15 45 65	21.783	18.281	40 55 55	18.291	16.174				
15 55 55	21.639	18.208	40 55 75 40 60 60	17.264	15.203				
15 55 75	21.032	17.984	40 60 60 40 65 65	16.283	13 390				
15 65 65	25.12	20.836	40 70 70	16.532	14.464				
20 20 40	23.941	20.182	50 50 50	17.913	15.866				
20 20 60	23:372	19.740	50 50 70	16.358	14.633				
20 25 25	24.430	20.557	50 55 55	16.953	15.165				
20 25 45	23.488	19.904	50 55 75	15.618	14.040				
20 25 65	22.867	19.369	50 60 60 50 65 65	15.994	13.398				
20 30 30	23.980	1	50 70 70	14.269	12.932				
20 30 50 20 30 70	22.795	19.390	60 60 60	14.602	13.194				
20 30 70 20 35 35	23.585	19.782	60 65 65	13.163	12.065				
20 35 55	22.129	18.900	60 70 70	12.580	11.319				
20 35 75	21.805	18.602	70 70 70	10.240	9.817				
	1								

For explanation see p. (47).

CONVERSION TABLES

Single Premium Conversion Table for Finding by Inspection the Present Value of £1 due at Death from the Value of an Annuity for Life

Value of		Valu	e of £1 at Dea	th	
Annuity	2½ %	3 %	3½ %	4 %	5 %
О	•97561	97087	*96618	96154	95238
I	.95122	.94175	93237	.92308	90476
2	92683	91262	·89855	.88462	.85714
3 4	*9024 4 *87805	·88350 ·85437	·86473 ·83092	*84615 *80769	.80952
					.76190
5	·85366 ·82927	·82524 ·79612	.79710	.76923	'71429
	·80488	·76699	*76329	.73077	.66667
7 8	'78049	·73786	°72947 °69565	69231	61905
9	.75610	.70874	66184	65385	·57143 ·52381
10	.73171	67961	*62802	*57692	
II	.70732	.65049	*59420	•53846	·47619
12	68293	62136	•56039	50000	38095
13	.65854	*59223.	*52657	*46154	33333
14	.63415	.26311	49275	42308	28571
15	·6097 6	·53398	°45894	*38462	.23810
16	.58537	.50485	42512	*34615	19048
17	•56098	·47573	*39130	•30769	14286
18	.53659	·44660	35749	'26923	'09524
19	*51220	·41748	.32367	.23077	.04762
20	·48780	.38835	·28986	*19231	.00000
21	'46341	*35922	*25604	·15385	
22	*43902	.33010	*22222	.11238	
23	.41463	'30097	·18841	.07692	
24	39024	.27184	·15459	°03846	•••
25 26	-36585	*24272	12077	,00000	
27	·34146 ·31707	·21359 ·1844 7	.08696	•••	•••
28	29268	15534	.05314		***
29	26829	12621	·01932	***	•••
				***	•••
ifference of	Diffe	rence (subtra	ctive) of Value	of £1 at Deat	h
Annuity	$2\frac{1}{2}\%$	3 %	3½ %	4 %	5 %
·I	*00244	'00291	*00228		
.2	.00488	00291	*00338 *00676	.00385	*00476
.3	*00732	.00874	. 01014	*00769 **01154	*00952
.4	00976	.01162	.01353	01154	01429
.5	.01220	·01456	.01691	°01923	*02381
.6	'01463	.01748	'02029	°02308	*02857
.7 .8	.01707	*02039	.02367	°02692	*03333
	.01921	·02330	02705	103077	.03810
.0	'02195	'02621	.03043	.03462	.04286

For explanation see pp. (47-51).

CONVERSION TABLES

Annual Premium Conversion Table for Finding by Inspection the Annual Premium to secure £1 at Death from the Value of an Annuity for Life. INTEREST 3 PER CENT.

				A	nnual	Premiu	m			
Value of Annuity				Decima	als of Va	lue of A	nnuity			
	•0	·ı	•2	.3	°4	·5	.6	.7	-8	.9
0- 0.9 1- 1.9 2- 2.9 3- 3.9 4- 4.9	'9709 '4709 '3042 '2209 '1709	·8800 ·4471 ·2935 ·2148 ·1670	·8042 ·4254 ·2834 ·2090 ·1632	·7401 ·4057 ·2739 ·2034 ·1596	·6852 ·3875 ·2650 ·1981 ·1561	·6375 ·3709 ·2566 ·1931 ·1527	·5959 ·3555 ·2487 ·1883 ·1494	·5591 ·3412 ·2411 ·1836 ·1463	.5264 .3280 .2340 .1792 .1433	'4972 '3157 '2273 '1750 '1404
5- 5.9 6- 6.9 7- 7.9 8- 8.9 9- 9.9	1375 1137 0959 0820	*1348 *1117 *0943 *0808 *0699	1322 1098 0928 0796 0689	·1296 ·1079 ·0914 ·0784 ·0680	·1271 ·1060 ·0899 ·0773 ·0670	·1247 ·1042 ·0885 ·0761 ·0661	·1224 ·1025 ·0872 ·0750 ·0652	1201 1007 0858 0740	°1179 °0991 °0845 °0729 °0635	·1158 ·0975 ·0832 ·0719 ·0626
10-10.0 13-13.0 13-13.0 14-11.0	°0618 °0542 °0478 °0423 °0375	*0610 *0535 *0472 *0418 *0371	.0602 .0528 .0466 .0413 .0367	*0594 *0522 *0461 *0408 *0362	·0586 ·0515 ·0455 ·0403 ·0358	•0578 •0509 •0449 •0398 •0354	·0571 ·0502 ·0444 ·0394 ·0350	·0563 ·0496 ·0439 ·0389 ·0346	·0556 ·0490 ·0433 ·0384 ·0342	*0549 *0484 *0428 *0380 *0338
15-15.9 16-16.9 18-18.9	*0334 *0297 *0264 *0235 *0209	.0330 .0294 .0261 .0232 .0206	·0326 ·0290 ·0258 ·0230 ·0204	*0322 *0287 *0255 *0227 *0201	·0318 ·0283 ·0252 ·0224 ·0199	·0315 ·0280 ·0249 ·0222 ·0197	·0311 ·0277 ·0246 ·0219 ·0194	·0308 ·0274 ·0243 ·0216 ·0192	.0304 .0271 .0241 .0214 .0190	·0300 ·0267 ·0238 ·0211 ·0187
20-20.9 21-21.9 22-22.9 23-23.9 24-24.9	·0185 ·0163 ·0144 ·0125 ·0109	.0183 .0161 .0142 .0124 .0107	*0180 *0159 *0140 *0122 *0106	·0178 ·0157 ·0138 ·0120 ·0104	.0176 .0155 .0136 .0119 .0102	·0174 ·0153 ·0134 ·0117 ·0101	*0172 *0151 *0132 *0115 *0099	°0170 °0149 °0131 °0114 °0098	·0167 ·0147 ·0129 ·0112 ·0096	·0165 ·0145 ·0127 ·0110 ·0095
25-25.9 26-26.9 27-27.9 28-28.9 29-29.9	.0093 .0079 .0066 .0054 .0042	*0092 *0078 *0065 *0052 *0041	.0090 .0076 .0063 .0051 .0040	*0089 *0075 *0062 *0050 *0039	*0088 *0074 *0061 *0049 *0038	*0086 *0072 *0060 *0048 *0037	·0085 ·0071 ·0058 ·0047 ·0036	*0083 *0070 *0057 *0045 *0034	*0082 *0068 *0056 *0044 *0033	*0080 *0067 *0055 *0043 *0032
30-30.9 32-32.9 31-31.9 30-30.9	'003I '002I '0012 '0003	'0030 '0020 '0011 '0002	'0029 '0019 '0010	*0028 *0018 *0009	*0027 *0017 *0008	*0026 *0016 *0007		*0024 *0015 *0005	*0023 *0014 *0005	*0022 *0013 *0004

For interest at add	1 .0192	1 ¹ / ₄ •0168	1½ '0143	.0110	er cent.
For interest at add	2	2 ½ •007 I	2 ½ '0047	2 ³ / ₄ *0024	"
For interest at subtract	3	3 ¹ / ₄ °0024	3½ 10047	3 ³ / ₄ '0070	"
For interest at subtract	4 *0093	4 ¹ / ₄ '0116	4½ •0139	4 ⁸ / ₄ 0162	**
For interest at subtract	5 0185	6 °0275	7 •0363	8 •0449	٠,

For explanation see pp. (47-51).

TABLE

OF

THE LOGARITHMS

OF

THE NATURAL NUMBERS

AND

LOGARITHMIC TABLES

OF

COMPOUND INTEREST

Log. 000. No. 100.

			. 1			
No.	0	1	2	3	4	Diff.
100	000000	000434	000868	001301	001734	433
101	004321	004751	005181	005609	006038	429
102	008600	009026	009451	009876	010300	425
103	012837	013259	013680	014100	014521	421
104	017033	017451	017868	018284	018700	416
105	021189	021603	022016	022428	022841	412
106	025306	025715	026125	026533	026942	409
107	029384	029789	030195	030600	031004	405
108	033424	033826	034227	034628	035029	401
109	037426	037825	038223	038620	039017	397
110	041393	041787	042182	042576	042969	393
111	045323	045714	046105	046495	046885	390
112	049218	049606	049993	050380	050766	387
113	053078	053463	053846	054230	054613	383
114	056905	057286	057666	058046	058426	380
115	060698	061075	061452	061829	062206	377
116	064458	064832	065206	065580	065953	374
117	068186	068557	068928	069298	069668	370
118	071882	072250	072617	072985	073352	367
119	075547	075912	076276	076640	077004	364
120	079181	079543	079904	080266	080626	361
121	082785	083144	083503	083861	084219	358
122	086360	086716	087071	087426	087781	355
123	089905	090258	090611	090963	091315	352
124	093422	093772	094122	094471	094820	349
125	096910	097257	097604	097951	098298	347
126	100371	100715	101059	101403	101747	344
127	103804	104146	104487	104828	105169	341
128	107210	107549	107888	108227	108565	338
129	110590	110926	111263	111599	111934	336
130	113943	114277	114611	114944	115278	333
131	117271	117603	117934	118265	118595	330
132	120574	120903	121231	121560	121888	328
133	123852	124178	124504	124830	125156	326
134	127105	127429	127753	128076	128399	323
135	130334	130655	130977	131298	131619	321
136	133539	133858	134177	134496	134814	319
137	136721	137037	137354	137671	137987	316
138	139879	140194	140508	140822	141136	314
139	143015	143327	143639	143951	144263	312
140	146128	146438	146748	147058	147367	310
141	149219	149527	149835	150142	150449	307
142	152288	152594	152900	153205	153510	305
143	155336	155640	155943	156246	156549	303
144	158362	158664	158965	159266	159567	301
145	161368	161667	161967	162266	162564	299
146	164353	164650	164947	165244	165541	297
147	167317	167613	167908	168203	168497	295
148	170262	170555	170848	171141	171434	293
149	173186	173478	173769	174060	174351	291

For explanation see pp. (51-59).

Log. 175. No. 149.

No.	5	6	7	8	9	Diff.		
100	002166	002598	003029	003461	003891	431		
101	006466	006894	007321	007748	008174	427		
102	010724	011147	011570	011993	012415	423		
103	014940	015360	015779	016197	016616	419		
104	019116	019532	019947	020361	020775	415		
105	023252	023664	024075	024486	024896	411		
106	027350	027757	028164	028571	028978	407		
107	031408	031812	032216	032619	033021	403		
108	035430	035830	036230	036629	037028	399		
109	039414	039811	040207	040602	040998	396		
110	043362	043755	044148	044540	044932	392		
111	047275	047664	048053	048442	048830	389		
112	051153	051538	051924	052309	052694	385		
113	054996	055378	055760	056142	056524	382		
114	058805	059185	059563	059942	060320	379		
115	062582	062958	063333	063709	064083	375		
116	066326	066699	067071	067443	067815	372		
117	070038	070407	070776	071145	071514	369		
118	073718	074085	074451	074816	075182	366		
119	077368	077731	078094	078457	078819	363		
120	080987	081347	081707	082067	082426	360		
121	084576	084934	085291	085647	086004	357		
122	088136	088490	088845	089198	089552	354		
123	091667	092018	092370	092721	093071	351		
124	095169	095518	095866	096215	096562	348		
125	098644	098990	099335	099681	100026	345		
126	102091	102434	102777	103119	103462	343		
127	105510	105851	106191	106531	106871	340		
128	108903	109241	109579	109916	110253	337		
129	112270	112605	112940	113275	113609	335		
130	115611	115943	116276	116608	116940	33 ²		
131	118926	119256	119586	119915	120245	3 ² 9		
132	122216	122544	122871	123198	123525	3 ² 7		
133	125481	125806	126131	126456	126781	3 ² 5		
134	128722	129045	129368	129690	130012	3 ² 2		
135	131939	132260	132580	132900	133219	320		
136	135133	135451	135769	136086	136403	318		
137	138303	138618	138934	139249	139564	315		
138	141450	141763	142076	142389	142702	313		
139	144574	144885	145196	145507	145818	311		
140	147676	147985	148294	148603	148911	309		
141	150756	151063	151370	151676	151982	306		
142	153815	154120	154424	154728	155032	304		
143	156852	157154	157457	157759	158061	302		
144	159868	160168	160469	160769	161068	300		
145	162863	163161	163460	163758	164055	298		
146	165838	166134	166430	166726	167022	296		
147	168792	169086	169380	169674	169968	294		
148	171726	172019	172311	172603	172895	292		
149	174641	174932	175222	175512	175802	290		

Log. 176. No. 150.

No.	0	1	2	3	4	Diff.
150	176091	176381	176670	176959	177248	289
151	178977	179264	179552	179839	180126	287
152	181844	182129	182415	182700	182985	285
153	184691	184975	185259	185542	185825	283
154	187521	187803	188084	188366	188647	281
155	190332	190612	190892	191171	191451	279
156	193125	193403	193681	193959	194237	278
157	195900	196176	196453	196729	197005	276
158	198657	198932	199206	199481	199755	274
159	201397	201670	201943	202216	202488	273
160	204120	204391	204663	204934	205204	271
161	206826	207096	207365	207634	207904	269
162	209515	209783	210051	210319	210586	268
163	212188	212454	212720	212986	213252	266
164	214844	215109	215373	215638	215902	264
165	217484	217747	218010	218273	218536	263
166	220108	220370	220631	220892	221153	261
167	222716	222976	223236	223496	223755	260
168	225309	225568	225826	226084	226342	258
169	227887	228144	228400	228657	228913	257
170	230449	230704	230960	231215	231470	255
171	232996	233250	233504	233757	234011	254
172	235528	235781	236033	236285	236537	252
173	238046	238297	238548	238799	239049	251
174	240549	240799	241048	241297	241546	249
175	243038	243286	243534	243782	244030	248
176	245513	245759	246006	246252	246499	246
177	247973	248219	248464	248709	248954	245
178	250420	250664	250908	251151	251395	244
179	252853	253096	253338	253580	253822	242
180	255273	255514	255755	255996	256237	241
181	257679	257918	258158	258398	258637	240
182	260071	260310	260548	260787	261025	238
183	262451	262688	262925	263162	263399	237
184	264818	265054	265290	265525	265761	236
185	267172	267406	267641	267875	268110	234
186	269513	269746	269980	270213	270446	233
187	271842	272074	272306	272538	272770	232
188	274158	274389	274620	274850	275081	231
189	276462	276692	276921	277151	277380	229
190	278754	278982	279211	279439	279667	228
191	281033	281261	281488	281715	281942	227
192	283301	283527	283753	283979	284205	226
193	285557	285782	286007	286232	286456	225
194	287802	288026	288249	288473	288696	224
195	290035	290257	290480	290702	290925	222
196	292256	292478	292699	292920	293141	221
197	294466	294687	294907	295127	295347	220
198	296665	296884	297104	297323	297542	219
199	298853	299071	299289	299507	299725	218

For explanation see pp. (51-59). (328)

Log. 300. No. 199.

No.	5	6	7	8	9	Diff.
150	177536	177825	178113	178401	178689	288
151	180413	180699	180986	181272	181558	286
152	183270	183555	183839	184123	184407	284
153	186108	186391	186674	186956	187239	283
154	188928	189209	189490	189771	190051	281
155	191730	192010	192289	192567	192846	279
156	194514	194792	195069	195346	195623	277
157	197281	197556	197832	198107	198382	275
158	200029	200303	200577	200850	201124	274
159	202761	203033	203305	203577	203848	272
160	205475	205746	206016	206286	206556	270
161	208173	208441	208710	208979	209247	269
162	210853	211121	211388	211654	211921	267
163	213518	213783	214049	214314	214579	265
164	216166	216430	216694	216957	217221	264
165	218798	219060	219323	219585	219846	262
166	221414	221675	221936	222196	222456	260
167	224015	224274	224533	224792	225051	259
168	226600	226858	227115	227372	227630	257
169	229170	229426	229682	229938	230193	256
170	231724	231979	232234	232488	232742	254
171	234264	234517	234770	235023	235276	253
172	236789	237041	237292	237544	237795	251
173	239299	239550	239800	240050	240300	250
174	241795	242044	242293	242541	242790	249
175	244277	244525	244772	245019	245266	247
176	246745	246991	247237	247482	247728	246
177	249198	249443	249687	249932	250176	244
178	251638	251881	252125	252368	252610	243
179	254064	254306	254548	254790	255031	242
180	256477	256718	256958	257198	257439	240
181	258877	259116	259355	259594	259833	239
182	261263	261501	261739	261976	262214	2 39
183	263636	263873	264109	264346	264582	236
184	265996	266232	266467	266702	266937	235
185	268344	268578	268812	269046	269279	234
186	270679	270912	271144	271377	271609	233
187	273001	273233	273464	273696	273927	231
188	275311	275542	275772	276002	276232	230
189	277609	277838	278067	278296	278525	229
190	279895	280123	280351	280578	280806	228
191	282169	282396	282622	282849	283075	226
192	284431	284656	284882	285107	285332	225
193	286681	286905	287130	287354	287578	224
193	288920	289143	289366	289589	289812	223
195	291147	291369	291591	291813	292034	222
196	293363	293584	293804	294025	294246	221
197	295567	295787	296007	296226	296446	220
198	297761	297979	298198	298416	298635	218
199	299943	300161	300378	300595	300813	217
-77	-77743	300101	300370	200393	300013	~1/

Log. 301. No. 200.

No.	0	1	2	3	4	Diff.
200	301030	301247	301464	301681	301898	217
201	303196	303412	303628	303844	304059	216
202	305351	305 5 66	305781	305996	306211	215
203	307496	307710	307924	308137	308351	214
204	309630	309843	310056	310268	310481	213
205	311754	311966	312177	312389	312600	212
206	313867	314078	314289	314499	314710	211
207	315970	316180	316390	316599	316809	210
208	318063	318272	318481	318689	318898	209
209	320146	320354	320562	320769	320977	208
210	322219	322426	322633	322839	323046	207
211	324282	324488	324694	324899	325105	206
212	326336	326541	326745	326950	327155	205
213	328380	328583	328787	328991	329194	204
214	330414	330617	330819	331022	331225	203
215	332438	332640	332842	333044	333246	202
216	334454	334655	334856	335057	335257	201
217	336460	336660	336860	337060	337260	200
218	338456	338656	338855	339054	339253	199
219	340444	340642	340841	341039	341237	198
220 221 222 223 224	342423 344392 346353 348305 350248	342620 344589 346549 348500 350442	342817 344785 346744 348694 350636	343014 344981 346939 348889 350829	343212 345178 347135 349083 351023	197 196 19 5 194
225	352183	352375	352568	352761	352954	193
226	354108	354301	354493	354685	354876	192
227	356026	356217	356408	356599	356790	191
228	357935	358125	358316	358506	358696	190
229	359835	360025	360215	360404	360593	190
230	361728	361917	362105	362294	362482	189
231	363612	363800	363988	364176	364363	188
232	365488	365675	365862	366049	366236	187
233	367356	367542	367729	367915	368101	186
234	369216	369401	369587	369772	369958	185
235	371068	371253	371437	371622	371806	185
236	372912	373096	373280	373464	373647	184
237	374748	374932	375115	375298	375481	183
238	376577	376759	376942	377124	377306	182
239	378398	378580	378761	378943	379124	182
240 241 242 243 244	380211 382017 383815 385606 387390	380392 382197 383995 385785 387568	380573 382377 384174 385964 387746	380754 382557 384353 386142 387923	380934 382737 384533 386321 388101	181 180 179 179
245	389166	389343	389520	389698	389875	177
246	390935	391112	391288	391464	391641	176
247	392 6 97	392873	393048	393224	393400	176
248	394452	394627	394802	394977	395152	175
249	396199	396374	396548	396722	396896	174

For explanation see pp. (51-59).

Log. 397. No. 249.

No.	5	6	7	8	9	Diff.			
200	302114	302331	302547	302764	302980	216			
201	304275	304491	304706	304921	305136	215			
202	306425	306639	306854	307068	307282	214			
203	308564	308778	308991	309204	309417	213			
204	310693	310906	311118	311330	311542	212			
205	312812	313023	313234	313445	313656	211			
206	314920	315130	315340	315551	315760	210			
207	317018	317227	317436	317646	317854	209			
208	319106	319314	319522	319730	319938	208			
209	321184	321391	321598	321805	322012	207			
210	323252	323458	323665	323871	324077	206			
211	325310	325516	325721	325926	326131	205			
212	327359	327563	327767	327972	328176	204			
213	329398	329601	329805	330008	330211	203			
214	331427	331630	331832	332034	332236	202			
215	333447	333649	333850	334051	334253	201			
216	335458	335658	335859	336059	336260	200			
217	337459	337659	337858	338058	338257	199			
218	339451	339650	339849	340047	340246	199			
219	341435	341632	341830	342028	342225	198			
220	343409	343606	343802	343999	344196	197			
221	345374	345570	345766	345962	346157	196			
222	347330	347525	347720	347915	348110	195			
223	349278	349472	349666	349860	350054	194			
224	351216	351410	351603	351796	351989	193			
225	353147	353339	353532	353724	353916	192			
226	355068	355260	355452	355643	355834	192			
227	356981	357172	357363	357554	357744	191			
228	358886	359076	359266	359456	359646	190			
229	360783	360972	361161	361350	361539	189			
230	362671	362859	363048	363236	363424	188			
231	364551	364739	364926	365113	365301	187			
232	366423	366610	366796	366983	367169	187			
233	368287	368473	368659	368845	369030	186			
234	370143	370328	370513	370698	370883	185			
235	371991	372175	372360	372544	372728	184			
236	373831	374015	374198	374382	374565	183			
237	375664	375846	376029	376212	376394	183			
238	377488	377670	377852	378034	378216	182			
239	379306	379487	379668	379849	380030	181			
240 241 242 243 244	381115 382917 384712 386499 388279	381296 383097 384891 386677 388456	381476 383277 385070 386856 388634	381656 383456 385249 387034 388811	381837 383636 385428 38721 2 388989	180 180 179 178			
245	390051	390228	390405	390582	390759	177			
246	391817	391993	392169	392345	392521	176			
247	393575	393751	393926	394101	394277	175			
248	395326	395501	395676	395850	396025	175			
249	397071	397245	397419	397592	397766	174			

Log. 397. No. 250.

No.	0	1	2	3	4	Diff.
250	397940	398114	398287	398461	398634	173
251	399674	399847	400020	400192	400365	173
252	401401	401573	401745	401917	402089	172
253	403121	403292	403464	403635	403807	171
254	404834	405005	405176	405346	405517	171
255	406540	406710	406881	407051	407221	170
256	408240	408410	408579	408749	408918	169
257	409933	410102	410271	410440	410609	169
258	411620	411788	411956	412124	412293	168
259	413300	413467	413635	413803	413970	167
260	414973	415140	415307	415474	415641	167
261	416641	416807	416973	417139	417306	166
262	418301	418467	418633	418798	418964	165
263	419956	420121	420286	420451	420616	165
264	421604	421768	421933	422097	422261	164
265	423246	423410	423574	423737	423901	163
266	424882	425045	425208	425371	425534	163
267	426511	426674	426836	426999	427161	162
268	428135	428297	428459	428621	428783	162
269	429752	429914	430075	430236	430398	161
270	431364	431525	431685	431846	432007	160
271	432969	433130	433290	433450	433610	160
272	434569	434729	434888	435048	435207	159
273	436163	436322	436481	436640	436799	159
274	437751	437909	438067	438226	438384	158
275	439333	439491	439648	439806	439964	157
276	440909	441066	441224	441381	441538	157
277	442480	442637	442793	4429 5 0	443106	156
278	444045	444201	444357	444513	444669	156
279	445604	445760	445915	446071	446226	155
280	447158	447313	447468	447623	447778	155
281	448706	448861	449015	449170	449324	154
282	450249	450403	450557	450711	450865	154
283	451786	451940	452093	452247	452400	153
284	453318	453471	453624	453777	453930	153
285	454845	454997	455150	455302	455454	152
286	456366	456 5 18	456670	456821	456973	152
287	457882	458033	458184	458336	458487	151
288	459392	459543	459694	459845	459995	151
289	460898	461048	461198	461348	461499	150
290 291 292 293 294	462398 463893 465383 466868 468347	462548 464042 465532 467016 468495	462697 464191 465680 467164 468643	462847 464340 465829 467312 468790	462997 464490 465977 467460 468938	149 149 148 148
295	469822	469969	470116	470263	470410	147
296	471292	471438	471585	471732	471878	146
297	472756	472903	473049	473195	473341	146
298	474216	474362	474508	474653	474799	146
299	475671	475816	475962	476107	476252	145

For explanation see pp. (51-59).

Log. 476. No. 299.

No.	5	6	7	8	9	Diff.				
250	398808	398981	399154	399328	399501	173				
251	400538	400711	400883	401056	401228	173				
252	402261	402433	402605	.402777	402949	172				
253	403978	404149	404320	404492	404663	171				
254	405688	405858	406029	406199	406370	171				
255	407391	407561	407731	407901	408070	170				
256	409087	409257	409426	409595	409764	169				
257	410777	410946	411114	411283	411451	169				
258	412461	412629	412796	412964	413132	168				
259	414137	414305	414472	414639	414806	167				
260	415808	415974	416141	416308	416474	167				
261	417472	417638	417804	417970	418135	166				
262	419129	419295	419460	419625	419791	165				
263	420781	420945	421110	421275	421439	165				
264	422426	422590	422754	422918	423082	164				
265	424065	424228	424392	424555	424718	163				
266	425697	425860	426023	426186	426349	163				
267	427324	427486	427648	427811	427973	162				
268	428944	429106	429268	429429	429591	162				
269	430559	430720	430881	431042	431203	161				
270	432167	432328	432488	432649	432809	160				
271	433770	433930	434090	434249	434409	160				
272	435367	435526	435685	435844	436004	159				
273	436957	437116	437275	437433	437592	159				
274	438542	438701	438859	439017	439175	158				
275	440122	440279	440437	440594	440752	157				
276	441695	441852	442009	442166	442323	157				
277	443263	443419	443576	443732	443889	156				
278	444825	444981	445137	445293	445449	156				
279	446382	446537	446692	446848	447003	155				
280	447933	448088	448242	448397	448552	155				
281	449478	449633	449787	449941	450095	154				
282	451018	451172	451326	451479	451633	154				
283	452553	452706	452859	453012	453165	153				
284	454082	454235	454387	454540	454692	153				
285	455606	455758	455910	456062	456214	152				
286	457125	457276	457428	457579	457731	152				
287	458638	458789	458940	459091	459242	151				
288	460146	460296	460447	460597	460748	150				
289	461649	461799	461948	462098	462248	150				
290 291 292 293 294	463146 464639 466126 467608 469085	463296 464788 466274 467756 469233	463445 464936 466423 467904 469380	463594 465085 466571 468052 469527	463744 465234 466719 468200 469675	149 149 148 148				
295	470557	470704	470851	470998	471145	147				
296	472025	472171	472318	472464	472610	146				
297	4734 ⁸ 7	473633	473779	473925	474071	146				
298	474944	475090	475235	475381	475526	146				
299	476397	476542	476687	476832	476976	145				

Log. 477. No. 300.

	-	-	0	0	71	
No.	0	1	2	3	4	Diff.
300	477121	477266	477411	477555	477700	145
301	478566	478711	478855	478999	479143	144
302	480007	480151	480294	480438	480582	144
303	481443	481586	481729	481872	482016	143
304	482874	483016	483159	483302	483445	143
305	484300	484442	484585	484727	484869	142
306	485721	485863	486005	486147	486289	142
307	487138	487280	487421	487563	487704	141
308	488551	488692	488833	488974	489114	141
309	489958	490099	490239	490380	490520	140
310	491362	491502	491642	491782	491922	140
311	492760	492900	493040	493179	493319	139
312	494155	494294	494433	494572	494711	139
313	495544	495683	495822	495960	496099	138
314	496930	497068	497206	497344	497483	138
315	498311	498448	498586	498724	498862	138
316	499687	499824	499962	500099	500236	137
317	501059	501196	501333	501470	501607	137
318	502427	502564	502700	502837	502973	136
319	503791	503927	504063	504199	504335	136
320	505150	505286	505421	505557	505693	136
321	506505	506640	506776	506911	507046	135
322	507856	507991	508126	508260	508395	135
323	509203	509337	509471	509606	509740	134
324	510545	510679	510813	510947	511081	134
325	511883	512017	512151	512284	512418	133
326	513218	513351	513484	513617	513750	133
327	514548	514681	514813	514946	515079	133
328	515874	516006	516139	516271	516403	132
329	517196	517328	517460	517592	517724	132
330	518514	518646	518777	518909	519040	131
331	519828	519959	520090	520221	520353	131
332	521138	521269	521400	521530	521661	131
333	522444	522575	522705	522835	522966	130
334	523746	523876	524006	524136	524266	130
335	525045	525 1 74	525304	525434	525563	129
336	526339	526469	526598	526727	526856	129
337	527630	527759	527888	528016	528145	129
338	528917	529045	529174	529302	529430	128
339	530200	530328	530456	530584	530712	128
340	531479	531607	531734	531862	531990	128
341	532754	532882	533009	533136	533264	127
342	534026	534153	534280	534407	534534	127
343	535294	535421	535547	535674	535800	126
344	536558	536685	536811	536937	537063	126
345	537819	537945	538071	538197	538322	126
346	539076	539202	539327	539452	539578	125
347	540329	540455	540580	540705	540830	125
348	541579	541704	541829	541953	542078	125
349	542825	542950	543074	543199	543323	124

For explanation see pp. (51-59).

Log. 543. No. 349.

No.	5	6	7	8	9	Diff.	
300	477844	477989	478133	478278	478422	145	
301	479287	479431	479575	479719	479863	144	
302	480725	480869	481012	481156	481299	144	
303	482159	482302	482445	482588	482731	143	
304	483587	483730	483872	484015	484157	143	
305	485011	485153	485295	485437	485579	142	
306	486430	486572	486714	486855	486997	142	
307	487845	487986	488127	488269	488410	141	
308	489255	489396	489537	489677	489818	141	
309	490661	490801	490941	491081	491222	140	
310	492062	492201	492341	492481	492621	139	
311	493458	493597	493737	493876	494015	139	
312	494850	494989	495128	495267	495406	139	
313	496238	496376	496515	496653	496791	138	
314	497621	497759	497897	498035	498173	138	
315	498999	499137	499275	499412	499550	138	
316	500374	500511	500648	500785	500922	137	
317	501744	501880	502017	502154	502291	137	
318	503109	503246	503382	503518	503655	136	
319	504471	504607	504743	504878	505014	136	
320	505828	505964	506099	506234	506370	136	
321	507181	507316	507451	507586	507721	135	
322	508530	508664	508799	508934	509068	135	
323	509874	510009	510143	510277	510411	134	
324	511215	511349	511482	511616	511750	134	
325	512551	512684	512818	512951	513084	133	
326	513883	514016	514149	514282	514415	133	
327	515211	515344	515476	515609	515741	133	
328	516535	516668	516800	516932	517064	132	
329	517855	517987	518119	518251	518382	132	
330 331 332 333 334	519171 520484 521792 523096 524396	519303 520615 521922 523226 524526	519434 520745 522053 523356 524656	519566 520876 522183 523486 524785	519697 521007 522314 523616 524915	131 131 130 130	
335	525693	525822	525951	526081	526210	129	
336	526985	527114	527243	527372	527501	129	
337	528274	528402	528531	528660	528788	129	
338	529559	529687	529815	529943	530072	128	
339	530840	530968	531096	531223	531351	128	
340	532117	532245	532372	532500	532627	128	
341	533391	533518	533645	533772	533899	127	
342	534661	534787	534914	535041	535167	127	
343	535927	536053	536180	536306	536432	126	
344	537189	537315	537441	537567	537693	126	
345	538448	53 ⁸ 574	538699	538825	538951	126	
346	539703	539 ⁸ 29	539954	540079	540204	125	
347	540955	541080	541205	541330	541454	125	
348	542203	542327	542452	542576	542701	125	
349	543447	543571	543696	543820	543944	124	

Log. 544. No. 350.

No.	0	1	2	3	4	Diff.
350 351 352 353 354	544068 545307 546543 547775 549003	544192 545431 546666 547898 549126	544316 545555 546789 548021 549249	544440 545678 546913 548144 549371	544564 545802 547036 548267 549494	124 124 123 123
355	550228	550351	550473	550595	550717	122
356	551450	551572	551694	551816	551938	122
357	552668	552790	552911	553033	553155	121
358	553883	554004	554126	554247	554368	121
359	555094	555215	555336	555457	555578	121
360	556303	556423	556544	556664	556785	120
361	557507	557627	557748	557868	557988	120
362	558709	558829	558948	559068	559188	120
363	559907	560026	560146	560265	560385	119
364	561101	561221	561340	561459	561578	119
365 366 367 368 369	562293 563481 564666 565848 567026	562412 563600 564784 565966 567144	562531 563718 564903 566084 567262	562650 563837 565021 566202 567379	562769 563955 565139 566320 567497	119 118 118 118
370	568202	568319	568436	568554	568671	117
371	569374	569491	569608	569725	569842	117
372	570543	570660	570776	570893	571010	117
373	571709	571825	571942	572058	572174	116
374	572872	572988	573104	573220	573336	116
375	574031	574147	574263	574379	574494	116
376	575188	5753°3	575419	575534	575650	115
377	576341	576457	576572	576687	576802	115
378	577492	577607	577722	577836	577951	115
379	578639	578754	578868	578983	579097	114
380	579784	579898	580012	580126	580241	114
381	580925	581039	581153	581267	581381	114
382	582063	582177	582291	582404	582518	114
383	583199	583312	583426	583539	583652	113
384	584331	584444	584557	584670	584783	113
385	585461	585574	585686	585799	585912	113
386	586587	586700	586812	586925	587037	112
387	587711	587823	587935	588047	588160	112
388	588832	588944	589056	589167	589279	112
389	589950	590061	590173	590284	590396	112
390 391 392 393 394	591065 592177 593286 594393 595496	591176 592288 593397 594503 595606	591287 592399 593508 594614 595717	591399 592510 593618 594724 595827	591510 592621 593729 594834 595937	110 110 111 111
395 396 397 398 399	596597 597695 598791 599883 600973	596707 597805 598900 599992 601082	596817 597914 599009 600101 601191	596927 598024 599119 600210 601299	597037 598134 599228 600319 601408	110 109 109 109

For explanation see pp. (51-59).

Log. 601. No. 399.

No.	5	6	7	8	9	Diff.	
350 351 352 353 354	544688 545925 547159 548389 549616	544812 546049 547282 548512 549739	544936 546172 547405 548635 549861	545060 546296 547529 548758 549984	545183 546419 547652 548881 550106	124 124 123 123 123	
355 356 357 358 359	550840 552060 553276 554489 555699	550962 552181 553398 554610 555820	551084 552303 553519 554731 555940	551206 552425 553640 554852 556061	551328 552547 553762 554973 556182	122 122 121 121 121	
360 361 362 363 364	556905 558108 559308 560504 561698	557026 558228 559428 560624 561817	557146 558349 559548 560743 561936	557267 558469 559667 560863 562055	557387 558589 559787 560982 562174	120 120 120 119 119	
365 366 367 368 369	562887 564074 565257 566437 567614	563006 564192 565376 566555 567732	563125 564311 565494 566673 567849	563244 564429 565612 566791 567967	563362 564548 565730 566909 568084	119 118 118 118	
370 371 372 373 374	568788 569959 571126 572291 573452	568905 570076 571243 572407 573568	569023 570193 571359 572523 573684	569140 570309 571476 572639 573800	569257 570426 571592 572755 573915	117 117 117 116 116	
375 376 377 378 379	574610 575765 576917 578066 579212	574726 575880 577032 578181 579326	574841 575996 577147 578295 579441	574957 576111 577262 578410 579555	575072 576226 577377 578525 579669	116 115 115 115	
380 381 382 383 384	580355 581495 582631 583765 584896	580469 581608 582745 583879 585009	580583 581722 582858 583992 585122	580697 581836 582972 584105 585235	580811 581950 583085 584218 585348	114 114 114 113	
385 386 387 388 389	586024 587149 588272 589391 590507	586137 587262 588384 589503 590619	586250 587374 588496 589615 590730	586362 587486 588608 589726 590842	586475 587599 588720 589838 590953	113 112 112 112 112	
390 391 392 393 394	591621 592732 593840 594945 596047	591732 592843 593950 595055 *596157	591843 592954 594061 595165 596267	591955 593064 594171 595276 596377	592066 593175 594282 595386 596487	110 111 111	
395 396 397 398 399	597146 598243 599337 600428 601517	597256 598353 599446 600537 601625	597366 598462 599556 600646 601734	597476 598572 599665 600755 601843	597586 598681 599774 600864 601951	109 109 109	

Log. 602. No. 400.

No.	0	1	2	3	4	Diff.
400 401 402 403 404	602060 603144 604226 605305 606381	602169 603253 604334 605413 606489	602277 603361 604442 605521 606596	602386 603469 604550 605628 606704	602494 603577 604658 605736 606811	108 108 108 108
405	607455	607562	607669	607777	607884	107
406	608526	608633	608740	608847	608954	107
407	609594	609701	609808	609914	610021	107
408	610660	610767	610873	610979	611086	106
409	611723	611829	611936	612042	612148	106
410	612784	612890	612996	613102	613207	106
411	613842	613947	614053	614159	614264	106
412	614897	615003	615108	615213	615319	105
413	615950	616055	616160	616265	616370	105
414	617000	617105	617210	617315	617420	105
415	618048	618153	618257	618362	618466	105
416	619093	619198	619302	619406	619511	104
417	620136	620240	620344	620448	620552	104
418	621176	621280	621384	621488	621592	104
419	622214	622318	622421	622525	622628	104
420	623249	623353	623456	623559	623663	103
421	624282	624385	624488	624591	624695	103
422	625312	625415	625518	625621	625724	103
423	626340	626443	626546	626648	626751	103
424	627366	627468	627571	627673	627775	102
425	628389	628491	628593	628695	628797	102
426	629410	629512	629613	629715	629817	102
427	630428	630530	630631	630733	630835	102
428	631444	631545	631647	631748	631849	101
429	632457	632559	632660	632761	632862	101
430 431 432 433 434	633468 634477 635484 636488 637490	633569 634578 635584 636588 637590	633670 634679 635685 636688 637690	633771 634779 635785 636789 637790	633872 634880 635886 636889 637890	100 100 101
435	638489	638589	638689	638789	638888	100
436	639486	639586	639686	639785	639885	100
437	640481	640581	640680	640779	640879	99
438	641474	641573	641672	641771	641871	99
439	642465	642563	642662	642761	642860	99
440	643453	643551	643650	643749	643847	98
441	644439	644537	644636	644734	644832	98
442	645422	645521	645619	645717	645815	98
443	646404	646502	646600	646698	646796	98
444	647383	647481	647579	647676	647774	98
445	648360	648458	648555	648653	648750	97
446	649335	649432	649530	649627	649724	97
447	650308	650405	650502	650599	650696	97
448	651278	651375	651472	651569	651666	97
449	652246	652343	652440	652536	652633	97

For explanation see pp. (51-59).

Log. 653. No. 449.

No.	5	6	7	8	9	Diff.	
400 401 402 403 404	602603 603686 604766 605844 606919	602711 603794 604874 605951 607026	602819 603902 604982 606059 607133	602928 604010 605089 606166 607241	603036 604118 605197 606274 607348	108 108 108 108	
405	607991	608098	608205	608312	608419	107	
406	609061	609167	609274	609381	609488	107	
407	610128	610234	610341	610447	610554	107	
408	611192	611298	611405	611511	611617	106	
409	612254	612360	612466	612572	612678	106	
410 411 412 413 414	613313 614370 615424 616476 617525	613419 614475 615529 616581 617629	613525 614581 615634 616686 617734	613630 614686 615740 616790 617839	613736 614792 615845 616895 617943	106 106 105 105	
415	618571	618676	618780	618884	618989	105	
416	619615	619719	619824	619928	620032	104	
417	620656	620760	620864	620968	621072	104	
418	621695	621799	621903	622007	622110	104	
419	622732	622835	622939	623042	623146	104	
420	623766	623869	623973	624076	624179	103	
421	624798	624901	625004	625107	625210	103	
422	625827	625929	626032	626135	626238	103	
423	626853	626956	627058	627161	627263	103	
424	627878	627980	628082	628185	628287	102	
425	628900	629002	629104	629206	629308	102	
426	629919	630021	630123	630224	630326	102	
427	630936	631038	631139	631241	631342	102	
428	631951	632052	632153	632255	632356	101	
429	632963	633064	633165	633266	633367	101	
430 431 432 433 434	633973 634981 635986 636989 637990	634074 635081 636087 637089 638090	634175 635182 636187 637189 638190	634276 635283 636287 637290 638290	634376 635383 636388 637390 638389	100 100 101 101	
435	638988	639088	639188	639287	639387	100	
436	639984	640084	640183	640283	640382	100	
437	640978	641077	641177	641276	641375	99	
438	641970	642069	642168	642267	642366	99	
439	642959	643058	643156	643255	643354	99	
440 441 442 443 444	643946 644931 645913 646894 647872	644044 645029 646011 646992 647969	644143 645127 646110 647089 648067	644242 645226 646208 647187 648165	644340 645324 646306 647285 648262	98 98 98 98	
445	648848	648945	649043	649140	649237	97	
446	649821	649919	650016	650113	650210	97	
447	650793	650890	650987	651084	651181	97	
448	651762	651859	651956	652053	652150	97	
449	652730	652826	652923	653019	653116	97	

Log. 653. No. 450.

No.	0	1	2	3	4	Diff.
450 451 452 453 454	653213 654177 655138 656098 657056	653309 654273 655235 656194 657152	65340 5 654369 655331 656290 657247	653502 654465 655427 656386 657343	653598 654562 655523 656482 657438	96 96 96 96
455	658011	658107	658202	658298	658393	95
456	658965	659060	659155	659250	659346	95
457	659916	660011	660106	660201	660296	95
458	660865	660960	661055	661150	661245	95
459	661813	661907	662002	662096	662191	94
460	662758	662852	662947	663041	663135	94
461	663701	663795	663889	663983	664078	94
462	664642	664736	664830	664924	665018	94
463	665581	665675	665769	665862	665956	94
464	666518	666612	666705	666799	666892	94
465	667453	667546	667640	667733	667826	93
466	668386	668479	668572	668665	668759	93
467	669317	669410	669503	669596	669689	93
468	670246	670339	670431	670524	670617	93
469	671173	671265	671358	671451	671543	93
470	672098	672190	672283	672375	672467	92
471	673021	673113	673205	673297	673390	92
472	673942	674034	674126	674218	674310	92
473	674861	674953	675045	675137	675228	92
474	675778	675870	675962	676053	676145	92
475 476 477 478 479	676694 677607 678518 679428 680336	676785 677698 678609 679519 680426	676876 677789 678700 679610 680517	676968 677881 678791 679700 680607	677059 677972 678882 679791 680698	91 91 91
480	681241	681332	681422	681513	681603	90
481	682145	682235	682326	682416 -	682506	90
482	683047	683137	683227	683317.	683407	90
483	683947	684037	684127	684217	684307	90
484	684845	684935	685025	685114	685204	90
485	685742	685831	685921	686010	686100	90
486	686636	686726	686815	686904	686994	89
487	687529	687618	687707	687796	687886	89
488	688420	688509	688598	688687	688776	89
489	689309	689398	689486	689575	689664	89
490	690196	690285	690373	690462	690550	89
491	691081	691170	691258	691347	691435	88
492	691965	692053	692142	692230	692318	88
493	692847	692935	693023	693111	693199	88
494	693727	693815	693903	693991	694078	88
495	694605	694693	694781	694868	694956	88
496	695482	695569	695657	695744	695832	87
497	696356	696444	696531	696618	696706	87
498	697229	697317	697404	697491	697578	87
499	698101	698188	698275	698362	698449	87

Log. 698. No. 499.

No.	5	6	7	8	9	Diff.
450	653695	653791	653888	653984	654080	96
451	654658	654754	654850	654946	655042	96
452	655619	655715	655810	655906	656002	96
453	656577	656673	656769	656864	656960	96
454	657534	657629	657725	657820	657916	96
455	658488	658584	658679	658774	658870	95
456	659441	659536	659631	659726	659821	95
457	660391	660486	660581	660676	660771	95
458	661339	661434	661529	661623	661718	95
459	662286	662380	662475	662569	662663	94
460	663230	663324	663418	663512	663607	94
461	664172	664266	664360	664454	664548	94
462	665112	665206	665299	665393	665487	94
463	666050	666143	666237	666331	666424	94
464	666986	667079	667173	667266	667360	94
465	667920	668013	668106	668199	668293	93
466	668852	668945	669038	669131	669224	93
467	669782	669875	669967	670060	670153	93
468	670710	670802	670895	670988	671080	93
469	671636	671728	671821	671913	672005	93
470	672560	672652	672744	672836	672929	92
471	673482	673574	673666	673758	673850	92
472	674402	674494	674586	674677	674769	92
473	675320	675412	675503	675595	675687	92
474	676236	676328	676419	676511	676602	92
475 476 477 478 479	677151 678063 678973 679882 680789	677242 678154 679064 679973 680879	677333 678245 679155 680063 680970	677424 678336 679246 680154 681060	677516 678427 679337 680245 681151	91 91 91
480 481 482 483 484	681693 682596 683497 684396 685294	681784 682686 683587 684486 685383	681874 682777 683677 684576 685473	681964 682867 683767 684666 685563	682055 682957 683857 684756 685652	90 90 90 90
485 486 487 488 489	686189 687083 687975 688865 689753	686279 687172 688064 688953 689841	686368 687261 688153 689042 689930	686458 687351 688242 689131 690019	686547 687440 688331 689220 690107	90 89 89 89
490	690639	690728	690816	690905	690993	89
491	691524	691612	691700	691789	691877	88
492	692406	692494	692583	692671	692759	88
493	693287	693375	693463	693551	693639	88
494	694166	694254	694342	694430	694517	88
495	695044	695131	695219	695307	695394	88
496	695919	696007	696094	696182	696269	87
497	696793	696880	696968	697055	697142	87
498	697665	697752	697839	697926	698014	87
499	698535	698622	698709	698796	698883	87

Log. 698. No. 500.

No.	0	1	2	3	4	Diff.
500	698970	699057	699144	699231	699317	87
501	699838	699924	700011	700098	700184	87
502	700704	700790	700877	700963	701050	86
503	701568	701654	701741	701827	701913	86
504	702431	702517	702603	702689	702775	86
505	703291	703377	703463	703549	703635	86
506	704151	704236	704322	704408	704494	86
507	705008	705094	705179	705265	705350	86
508	705864	705949	706035	706120	706206	8 5
509	706718	706803	706888	706974	707059	85
510	707570	707655	707740	707826	707911	85
511	708421	708506	708591	708676	708761	85
512	709270	709355	709440	709524	709609	85
513	710117	710202	710287	710371	710456	85
514	710963	711048	711132	711217	711301	84
515	711807	711892	711976	712060	712144	84
516	712650	712734	712818	712902	712986	84
517	713491	713575	713659	713742	713826	84
518	714330	714414	714497	714581	714665	84
519	715167	715251	715335	715418	715502	84
520	716003	716087	716170	716254	716337	83
521	716838	716921	717004	717088	717171	83
522	717671	717754	717837	717920	718003	83
523	718502	718585	718668	718751	718834	83
524	719331	719414	719497	719580	719663	83
525	720159	720242	720325	720407	720490	83
526	720986	721068	721151	721233	721316	83
527	721811	721893	721975	722058	722140	82
528	722634	722716	722798	722881	722963	82
529	723456	723538	723620	723702	723784	82
530	724276	724358	724440	724522	724604	82
531	725095	725176	725258	725340	725422	82
5 32	725912	725993	726075	726156	726238	82
533	726727	726809	726890	726972	727053	81
534	727541	727623	727704	727785	727866	81
535 536 537 538 539	728354 729165 729974 730782 731589	728435 729246 730055 730863 731669	728516 729327 730136 730944 731750	728597 729408 730217 731024 731830	728678 729489 730298 731105 731911	81 81 81 81
540	732394	732474	732555	732635	732715	80
541	733197	733278	733358	733438	733518	80
542	733999	734079	734160	734240	734320	80
543	734800	734880	734960	735040	735120	80
544	735599	735679	735759	735838	735918	80
545	736397	736476	736556	736635	736715	80
546	737193	737272	737352	737431	737511	79
547	737987	738067	738146	738225	738305	79
548	738781	738860	738939	739018	739097	79
549	739572	739651	739731	739810	739889	79

Log. 740. No. 549.

No.	5	6	7	8	9	Diff.
500	699404	699491	699578	699664	699751	87.
501	700271	700358	700444	700531	700617	87
502	701136	701222	701309	701395	701482	86
503	701999	702086	702172	702258	702344	86
504	702861	702947	703033	703119	703205	86
505	703721	703807	703893	703979	704065	86
506	704579	704665	704751	704837	704922	86
507	705436	705522	705607	705693	705778	86
508	706291	706376	706462	706547	706632	85
509	707144	707229	707315	707400	707485	85
510	707996	708081	708166	708251	708336	85
511	708846	708931	709015	709100	709185	85
512	709694	709779	709863	709948	710033	85
513	710540	710625	710710	710794	710879	85
514	711385	711470	711554	711639	711723	84
515	712229	712313	712397	712481	712566	84
516	713070	713154	713238	713323	713407	84
517	713910	713994	714078	714162	714246	84
518	714749	714833	714916	715000	715084	84
519	715586	715669	715753	715836	715920	84
520	716421	716504	716588	716671	716754	83
521	717254	717338	717421	717504	717587	83
522	718086	718169	718253	718336	718419	83
523	718917	719000	719083	719165	719248	83
524	719745	719828	719911	719994	720077	83
525	720573	720655	720738	720821	720903	83
526	721398	721481	721563	721646	721728	83
527	722222	722305	722387	722469	722552	82
528	723045	723127	723209	723291	723374	82
529	723866	723948	724030	724112	724194	82
530	724685	724767	724849	724931	725013	82
531	725503	725585	725667	725748	725830	82
532	726320	726401	726483	726564	726646	82
533	727134	727216	727297	727379	727460	81
534	727948	728029	728110	728191	728273	81
535 536 537 538 539	728759 729570 730378 731186 731991	728841 729651 730459 731266 732072	728922 729732 730540 731347 732152	729003 729813 730621 731428 732233	729084 729893 730702 731508 732313	81 81 81 81
540 541 542 543 544	732796 733598 734400 735200 735998	732876 733679 734480 735279 736078	732956 733759 734560 735359 736157	733°37 733839 734640 735439 736237	733117 733919 734720 735519 736317	80 80 80 80
545	736795	736874	736954	737034	737113	80
546	737590	737670	737749	737829	737908	79
547	738384	738463	738543	738622	738701	79
548	739177	739256	739335	739414	739493	79
549	739968	740047	740126	740205	740284	79

Log. 740. No. 550.

No.	0	. 1	2	3	4	Diff.
550	740363	740442	740521	740600	740678	79
551	741152	741230	741309	741388	741467	79
552	741939	742018	742096	742175	742254	79
553	742725	742804	742882	742961	743039	78
554	743510	743588	743667	743745	743823	78
555	744293	744371	744449	744528	744606	78
556	745075	745153	745231	745309	7453 ⁸ 7	78
557	745855	745933	746011	746089	746167	78
558	746634	746712	746790	746868	746945	78
559	747412	747489	747567	747645	747722	78
560	748188	748266	748343	748421	748498	77
561	748963	749040	749118	749195	749272	77
562	749736	749814	749891	749968	750045	77
563	750508	750586	750663	750740	750817	77
564	751279	751356	751433	751510	751587	77
565	752048	752125	752202	752279	752356	77
566	752816	752893	752970	753047	753123	77
567	753583	753660	753736	753813	753889	77
568	754348	754425	754501	754578	754654	76
569	755112	755189	755265	755341	755417	76
570	755875	755951	756027	756103	756180	76
571	756636	756712	756788	756864	756940	76
572	757396	757472	757548	757624	757700	76
573	758155	758230	758306	758382	758458	76
574	758912	758988	759063	759139	759214	76
575	759668	759743	759819	759894	759970	75
576	760422	760498	760573	760649	760724	75
577	761176	761251	761326	761402	761477	75
578	761928	762003	762078	762153	762228	75
579	762679	762754	762829	762904	762978	75
580	763428	763503	763578	763653	763727	75
581	764176	764251	764326	764400	764475	75
582	764923	764998	765072	765147	765221	75
583	765669	765743	765818	765892	765966	74
584	766413	766487	766562	766636	766710	74
585	767156	767230	767304	767379	767453	74
586	767898	767972	768046	768120	768194	74
587	768638	768712	768786	768860	768934	74
588	769377	769451	769525	769599	769673	74
589	770115	770189	770263	770336	770410	74
590 591 592 593 594	770852 771587 772322 773055 773786	770926 771661 772395 773128 773860	770999 771734 772468 773201 773933	771073 771808 772542 773274 774006	771146 771881 772615 773348 774079	74 73 73 73 73 73
595 596 597 598 599	774517 775246 775974 776701 777427	774590 775319 776047 776774 777499	774663 775392 776120 776846 777572	774736 775465 776193 776919 777644	774809 775538 776265 776992 777717	73 73 73 73 73 72

Log. 778. No. 599.

No.	5	6	7	8	9	Diff.
550	740757	740836	740915	740994	741073	79
551	741546	741624	741703	741782	741860	79
552	742332	742411	742489	742568	742647	79
553	743118	743196	743275	743353	743431	78
554	743902	743980	744058	744136	744215	78
555	744684	744762	744840	744919	744997	78
556	745465	745543	745621	745699	745777	78
557	746245	746323	746401	746479	746556	78
558	747023	747101	747179	747256	747334	78
559	747800	747878	747955	748033	748110	78
560	748576	748653	748731	748808	748885	77
561	749350	749427	749504	749582	749659	77
562	750123	750200	750277	750354	750431	77
563	750894	750971	751048	751125	751202	77
564	751664	751741	751818	751895	751972	77
565	752433	752509	752586	752663	752740	77
566	753200	753277	753353	753430	753506	77
567	753966	754042	754119	754195	754272	77
568	754730	754807	754883	754960	755036	76
569	755494	755570	755646	755722	755799	76
570	756256	756332	756408	756484	756560	76
571	757016	757092	757168	757244	757320	76
572	757775	757851	757927	758003	758079	76
573	758533	758609	758685	758761	758836	76
574	759290	759366	759441	759517	759592	76
575	760045	760121	760196	760272	760347	75
576	760799	760875	760950	761025	761101	75
577	761552	761627	761702	761778	761853	75
578	762303	762378	762453	762529	762604	75
579	763053	763128	763203	763278	763353	75
580	763802	763877	763952	764027	764101	75
581	764550	764624	764699	764774	764848	75
582	765296	765370	765445	765520	765594	75
583	766041	766115	766190	766264	766338	74
584	766785	766859	766933	767007	767082	74
585	767527	767601	767675	767749	767823	74
586	768268	768342	768416	768490	768564	74
587	769008	769082	769156	769230	769303	74
588	769746	769820	769894	769968	770042	74
589	770484	770557	770631	770705	770778	74
590 591 592 593 594	771220 771955 772688 773421 774152	771293 772028 772762 773494 774225	771367 772102 772835 773567 774298	771440 772175 772908 773640 774371	771514 772248 772981 773713 774444	74 73 73 73 73 73
595 596 597 598 599	774882 775610 776338 777064 777789	774955 775683 776411 777137 777862	775028 775756 776483 777209 777934	775100 775829 776556 777282 778006	775173 775902 776629 777354 778079	73 73 73 73 73 72

Log. 778. No. 600.

No.	0	1	2	3	4	Diff.
600 601 602 603 604	778151 778874 779596 780317 781037	778224 778947 779669 780389 781109	778296 779019 779741 780461 781181	778368 779091 779813 780533 781253	778441 779163 779885 780605 781324	72 72 72 72 72 72
605	781755	781827	781899	781971	782042	72
606	782473	782544	782616	782688	782759	72
607	783189	783260	783332	783403	783475	71
608	783904	783975	784046	784118	784189	71
609	784617	784689	784760	784831	784902	71
610	785330	785401	785472	785543	785615	71
611	786041	786112	786183	786254	786325	71
612	786751	786822	786893	786964	787035	71
613	787460	787531	787602	787673	787744	71
614	788168	788239	788310	788381	788451	71
615	788875	788946	789016	789087	789157	71
616	789581	789651	789722	789792	789863	70
617	790285	790356	790426	790496	7 90567	70
618	790988	791059	791129	791199	791269	70
619	791691	791761	791831	791901	791971	70
620	792392	792462	792532	792602	792672	70
621	793092	793162	793231	793301	793371	70
622	793790	793860	793930	794000	794070	70
623	794488	794558	794627	794697	794767	70
624	795185	795254	795324	795393	795463	70
625 626 627 628 629	795880 796574 797268 797960 798651	795949 796644 797337 798029 798720	796019 796713 797406 798098 798789	796088 796782 797475 798167 798858	796158 796852 797545 798236 798927	69 69 69 69
630 631 632 633 634	799341 800029 800717 801404 802089	799409 800098 800786 801472 802158	799478 800167 800854 801541 802226	799547 800236 800923 801609 802295	799616 800305 800992 801678 802363	69 69 69 69
635	802774	802842	802910	802979	803047	68
636	803457	803525	803594	803662	803730	68
637	804139	804208	804276	804344	804412	68
638	804821	804889	804957	805025	805093	68
639	805501	805569	805637	805705	805773	68
640	806180	806248	806316	806384	806451	68
641	806858	806926	806994	807061	807129	68
642	807535	807603	807670	807738	807806	68
643	808211	808279	808346	808414	808481	67
644	808886	808953	809021	809088	809156	67
645	809560	809627	809694	809762	809829	67
646	810233	810300	810367	810434	810501	67
647	810904	810971	811039	811106	811173	67
648	811575	811642	811709	811776	811843	67
649	812245	812312	812379	812445	812512	67

Log. 812. No. 649.

- 3							
No.	5	6	7	8	9	Diff.	
600 601 602 603 604	778513 779236 779957 780677 781396	778585 779308 780029 780749 781468	778658 779380 780101 780821 781540	778730 779452 780173 780893 781612	778802 779524 780245 780965 781684	72 72 72 72 72 72	
605	782114	782186	782258	782329	782401	72	
606	782831	782902	782974	783046	783117	72	
607	783546	783618	783689	783761	783832	71	
608	784261	784332	784403	784475	784546	71	
609	784974	785045	785116	785187	785259	71	
610	785686	785757	785828	785899	785970	71	
611	786396	786467	786538	786609	786680	71	
612	787106	787177	787248	787319	787390	71	
613	787815	787885	787956	788027	788098	71	
614	788522	788593	788663	788734	788804	71	
615	789228	789299	789369	789440	789510	71	
616	789933	790004	790074	790144	790215	70	
617	790637	790707	790778	790848	790918	70	
618	791340	791410	791480	791550	791620	70	
619	792041	792111	792181	792252	792322	70	
620	792742	792812	792882	792952	793022	70	
621	793441	793511	793581	793651	793721	70	
622	794139	794209	794279	794349	794418	70	
623	794836	794906	794976	795045	795115	70	
624	795532	795602	795672	795741	795811	70	
625 626 627 628 629	796227 796921 797614 798305 798996	796297 796990 797683 798374 799065	796366 797060 797752 798443 799134	796436 797129 797821 798513 799203	796505 797198 797890 798582 799272	69 69 69 69	
630 631 632 633 634	799685 800373 801061 801747 802432	799754 800442 801129 801815 802500	799823 800511 801198 801884 802568	799892 800580 801266 801952 802637	799961 800648 801335 802021 802705	69 69 69 69	
635	803116	803184	803252	803321	803389	68	
636	803798	803867	803935	804003	804071	68	
637	804480	804548	804616	804685	804753	68	
638	805161	805229	805297	805365	805433	68	
639	805841	805908	805976	806044	806112	68	
640	806519	806587	806655	806723	806790	68	
641	807197	807264	807332	807400	807467	68	
642	807873	807941	808008	808076	808143	68	
643	808549	808616	808684	808751	808818	67	
644	809223	809290	809358	809425	809492	67	
645	809896	809964	810031	810098	810165	67	
646	810569	810636	810703	810770	810837	67	
647	811240	811307	811374	811441	811508	67	
648	811910	811977	812044	812111	812178	67	
649	812579	812646	812713	812780	812847	67	

Log. 812. No. 650.

No.	0	1	2	3	4	Diff.
650	812913	812980	813047	813114	813181	67
651	813581	813648	813714	813781	813848	67
652	814248	814314	814381	814447	814514	67
653	814913	814980	815046	815113	815179	66
654	815578	815644	815711	815777	815843	66
655 656 657 658 659	816241 816904 817565 818226 818885	816308 816970 817631 818292 818951	816374 817036 817698 818358 819017	816440 817102 817764 818424 819083	816506 817169 817830 818490 819149	66 66 66 66
660	819544	819610	819676	819741	819807	66
661	820201	820267	820333	820399	820464	66
662	820858	820924	820989	821055	821120	66
663	821514	821579	821645	821710	821775	65
664	822168	822233	822299	822364	822430	65
665	822822	822887	822952	823018	823083	65
666	823474	823539	823605	823670	823735	65
667	824126	824191	824256	824321	824386	65
668	824776	824841	824906	824971	825036	65
669	825426	825491	825556	825621	825686	65
670	826075	826140	826204	826269	826334	65
671	826723	826787	826852	826917	826981	65
672	827369	827434	827499	827563	827628	65
673	828015	828080	828144	828209	828273	64
674	828660	828724	828789	828853	828918	64
675	829304	829368	829432	829497	829561	64
676	829947	830011	830075	830139	830204	64
677	830589	830653	830717	830781	830845	64
678	831230	831294	831358	831422	831486	64
679	831870	831934	831998	832062	832126	64
680	832509	832573	832637	832700	832764	64
681	833147	833211	833275	833338	833402	64
682	833784	833848	833912	833975	834039	64
683	834421	834484	834548	834611	834675	64
684	835056	835120	835183	835247	835310	63
685	835691	835754	835817	835881	835944	63
686	836324	836387	836451	836514	836577	63
687	836957	837020	837083	837146	837210	63
688	837588	837652	837715	837778	837841	63
689	838219	838282	838345	838408	838471	63
690	838849	838912	838975	839038	839101	63
691	839478	839541	839604	839667	839729	63
692	840106	840169	840232	840294	840357	63
693	840733	840796	840859	840921	840984	63
694	841359	841422	841485	841547	841610	63
695	841985	842047	842110	842172	842235	62
696	842609	842672	842734	842796	842859	62
697	843233	843295	843357	843420	843482	62
698	843855	843918	843980	844042	844104	62
699	844477	844539	844601	844664	844726	62

Log. 845. No. 699.

No.	5	6	7	8	9	Diff.
650 651 652 653 654	813247 813914 814581 815246 815910	813314 813981 814647 815312 815976	813381 814048 814714 815378 816042	813448 814114 814780 815445 816109	813514 814181 814847 815511 816175	67 67 67 66 66
655 656 657 658 659	816573 817235 817896 818556 819215	816639 817301 817962 818622 819281	816705 817367 818028 818688 819346	816771 817433 818094 818754 819412	816838 817499 818160 818820 819478	66 66 66 66
660 661 662 663 664	819873 820530 821186 821841 822495	819939 820595 821251 821906 822560	820004 820661 821317 821972 822626	820070 820727 821382 822037 822691	820136 820792 821448 822103 822756	66 66 65 65
665 666 667 668 669	823148 823800 824451 825101 825751	823213 823865 824516 825166 825815	823279 823930 824581 825231 825880	823344 823996 824646 825296 825945	823409 824061 824711 825361 826010	65 65 65 65
670 671 672 673 674	826399 827046 827692 828338 828982	826464 827111 827757 828402 829046	826528 827175 827821 828467 829111	826593 827240 827886 828531 829175	826658 827305 827951 828595 829239	65 65 65 64 64
675 676 677 678 679	829625 830268 830909 831550 832189	829690 830332 830973 831614 832253	829754 830396 831037 831678 832317	829818 830460 831102 831742 832381	829882 830525 831166 831806 832445	64 64 64 64 64
680 681 682 683 684	832828 833466 834103 834739 835373	832892 833530 834166 834802 835437	832956 833593 834230 834866 835500	833020 833657 834294 834929 835564	833083 833721 834357 834993 835627	64 64 64 64 63
685 686 687 688 689	836007 836641 837273 837904 838534	836071 836704 837336 837967 838597	836134 836767 837399 838030 838660	836197 836830 837462 838093 838723	836261 836894 837525 838156 838786	63 63 63 63
690 691 692 693 694	839164 839792 840420 841046 841672	839227 839855 840482 841109 841735	839289 839918 840545 841172 841797	839352 839981 840608 841234 841860	839415 840043 840671 841297 841922	63 63 63 63
695 696 697 698 699	842297 842921 843544 844166 844788	842360 842983 843606 844229 844850	842422 843046 843669 844291 844912	842484 843108 843731 844353 844974	842547 843170 843793 844415 845036	62 62 62 62 62

Log. 845. No. 700.

No.	0	1	2	3	4	Diff.
700	845098	845160	845222	845284	845346	62
701	845718	845780	845842	845904	845966	62
702	846337	846399	846461	846523	846585	62
703	846955	847017	847079	847141	847202	62
704	847573	847634	847696	847758	847819	62
705	848189	848251	848312	848374	848435	62
706	848805	848866	848928	848989	849051	61
707	849419	849481	849542	849604	849665	61
708	850033	850095	850156	850217	850279	61
709	850646	850707	850769	850830	850891	61
710 711 712 713 714	851258 851870 852480 853090 853698	851320 851931 852541 853150 853759	851381 851992 852602 853211 853820	851442 852053 852663 853272 853881	851503 852114 852724 853333 853941	61 61 61 61
715 716 717 718 719	854306 854913 855519 856124 856729	854367 854974 855580 856185 856789	854428 855034 855640 856245 856850	854488 855095 855701 856306 856910	854549 855156 855761 856366 856970	61 61 60 60
720 721 722 723 724	857332 857935 858537 859138 859739	857393 857995 858597 8591 9 8 859 7 99	857453 858056 858657 859258 859859	857513 858116 858718 859318 859918	857574 858176 858778 859379 859978	60 60 60 60
725	860338	860398	860458	860518	860578	60
726	860937	860996	861056	861116	861176	60
727	861534	861594	861654	861714	861773	60
728	862131	862191	862251	862310	862370	60
729	862728	862787	862847	862906	862966	60
730	863323	863382	863442	863501	863561	59
731	863917	863977	864036	864096	864155	59
732	864511	864570	864630	864689	864748	59
733	865104	865163	865222	865282	865341	59
734	865696	865755	865814	865874	865933	59
735	866287	866346	866405	866465	866524	59
736	866878	866937	866996	867055	867114	59
737	867467	867526	867585	867644	867703	59
738	868056	868115	868174	868233	868292	59
739	868644	868703	868762	868821	868879	59
740	869232	869290	869349	869408	869466	59
741	869818	869877	869935	869994	870053	59
742	870404	870462	870521	870579	870638	58
743	870989	871047	871106	871164	871223	58
744	871573	871631	871690	871748	871806	58
745	872156	872215	872273	872331	872389	58
746	872739	872797	872855	872913	872972	58
747	873321	873379	873437	873495	873553	58
748	873902	873960	874018	874076	874134	58
749	874482	874540	874598	874656	874714	58

Log 875. No. 749.

No.	5	6	7	8	9	Diff.
700	845408	8454 70	845532	845594	845656	62
701	846028	846090	846151	846213	846275	62
702	846646	846708	846770	846832	846894	62
703	847264	847326	847388	847449	847511	62
704	847881	847943	848004	848066	848128	62
705	848497	848559	848620	848682	848743 · 849358 849972 850585 851197	62
706	849112	849174	849235	849297		61
707	849726	849788	849849	849911		61
708	850340	850401	850462	850524		61
709	850952	851014	851075	851136		61
710 711 712 713 714	851564 852175 852785 853394 854002	851625 852236 852846 853455 854063	851686 852297 852907 853516 854124	851747 852358 852968 853577 854185	851809 852419 853029 853637 854245	61 61 61 61
715 716 717 718 719	854610 855216 855822 856427 857031	854670 855277 855882 856487 857091	854731 855337 855943 856548 857152	854792 855398 856003 856608 857212	854852 855459 856064 856668 857272	61 60 60
720	857634	857694	857755	857815	857875	60
721	858236	858297	858357	858417	858477	60
722	858838	858898	858958	859018	859078	60
723	859439	859499	859559	859619	859679	60
724	860038	860098	860158	860218	860278	60
725	860637	860697	860757	860817	860877	60
726	861236	861295	861355	861415	861475	60
727	861833	861893	861952	862012	862072	60
728	862430	862489	862549	862608	862668	60
729	863025	863085	863144	863204	863263	60
730	863620	863680	863739	863799	863858	59
731	864214	864274	864333	864392	864452	59
732	864808	864867	864926	864985	865045	59
733	865400	865459	865519	865578	865637	59
734	865992	866051	866110	866169	866228	59
735	866583	866642	866701	866760	866819	59
736	867173	867232	867291	867350	867409	59
737	867762	867821	867880	867939	867998	59
738	868350	868409	868468	868527	868586	59
739	868938	868997	869056	869114	869173	59
740	869525	869584	869642	869701	869760	59
741	870111	870170	870228	870287	870345	59
742	870696	870755	870813	870872	870930	58
743	871281	871339	871398	871456	871515	58
744	871865	871923	871981	872040	872098	58
745	872448	872506	872564	872622	872681	58
746	873030	873088	873146	873204	873262	58
747	873611	873669	873727	873785	873844	58
748	874192	874250	874308	874366	874424	58
749	874772	874830	874888	874945	875003	58

Log. 875. No. 750.

No.	0	1	2	3	4	Diff.
750	875061	875119	875177	875235	875293	58
751	875640	875698	875756	875813	875871	58
752	876218	876276	876333	876391	876449	58
753	876795	876853	876910	876968	877026	58
754	877371	877429	877487	877544	877602	58
755	877947	878004	878062	878119	878177	57
756	878522	878579	878637	878694	878752	57
757	879096	879153	879211	879268	879325	57
758	879669	879726	879784	879841	879898	57
759	880242	880299	880356	880413	880471	57
760	880814	880871	880928	880985	881042	57
761	881385	881442	881499	881556	881613	57
762	881955	882012	882069	882126	882183	57
763	882525	882581	882638	882695	882752	57
764	883093	883150	883207	883264	883321	57
765 766 767 768 769	883661 884229 884795 885361 885926	883718 884285 884852 885418 885983	883775 884342 884909 885474 886039	883832 884399 884965 885531 886096	883888 884455 885022 885587 886152	57 57 57 57 57 56
770	886491	886547	886604	886660	886716	56
771	887054	887111	887167	887223	887280	56
772	887617	887674	887730	887786	887842	56
773	888179	888236	888292	888348	888404	56
774	888741	888797	888853	888909	888965	56
775	889302	889358	889414	889470	889526	56
776	889862	889918	889974	890030	890086	56
777	890421	890477	890533	890589	890645	56
778	890980	891035	891091	891147	891203	56
779	891537	891593	891649	891705	891760	56
780	892095	892150	892206	892262	892317	56
781	892651	892707	892762	892818	892873	56
782	893207	893262	893318	893373	893429	56
783	893762	893817	893873	893928	893984	55
784	894316	894371	894427	894482	894538	55
785	894870	894925	894980	895036	895091	55
786	895423	895478	895533	895588	895644	55
787	895975	896030	896085	896140	896195	55
788	896526	896581	896636	896692	896747	55
789	8970 77	897132	897187	897242	897297	55
790	897627	897682	897737	897792	897847	55
791	898176	898231	898286	898341	898396	55
792	898725	898780	898835	898890	898944	55
793	899273	899328	899383	899437	899492	55
794	899821	899875	899930	899985	900039	55
795	900367	900422	900476	900531	900586	55
796	900913	900968	901022	901077	901131	55
797	901458	901513	901567	901622	901676	54
798	902003	902057	902112	902166	902221	54
799	902547	902601	902655	902710	902764	54

Log. 903. No. 799.

No.	5	6	7	8	9	Diff.
750	875351	875409	875466	875524	875582	58
751	875929	875987	876045	876102	876160	58
752	876507	876564	876622	876680	876737	58
753	877083	877141	877199	877256	877314	58
754	877659	877717	877774	877832	877889	58
755	878234	878292	878349	878407	878464	57
756	878809	878866	878924	878981	879039	57
757	879383	879440	879497	879555	879612	57
758	879956	880013	880070	880127	880185	57
759	880528	880585	880642	880699	880756	57
760	881099	881156	881213	881271	881328	57
761	881670	881727	881784	881841	881898	57
762	882240	882297	882354	882411	882468	57
763	882809	882866	882923	882980	883037	57
764	883377	883434	883491	883548	883605	57
765	883945	884002	884059	884115	884172	57
766	884512	884569	884625	884682	884739	57
767	885078	885135	885192	885248	885305	57
768	885644	885700	885757	885813	885870	57
769	886209	886265	886321	886378	886434	56
770	886773	886829	886885	886942	886998	56
771	887336	887392	887449	887505	887561	56
772	887898	887955	888011	888067	888123	56
773	888460	888516	888573	888629	888685	56
774	889021	889077	889134	889190	889246	56
775	889582	889638	889694	889750	889806	56
776	890141	890197	890253	890309	890365	56
777	890700	890756	890812	890868	890924	56
778	891259	891314	891370	891426	891482	56
779	891816	891872	891928	891983	892039	56
780	892373	892429	892484	892540	892595	56
781	892929	892985	893040	893096	893151	56
782	893484	893540	893595	893651	893706	56
783	894039	894094	894150	894205	894261	55
784	894593	894648	894704	894759	894814	55
785	895146	895201	895257	895312	895367	55
786	895699	895754	895809	895864	895920	55
787	896251	896306	896361	896416	896471	55
788	896802	896857	896912	896967	897022	55
789	897352	897407	897462	897517	897572	55
790	897902	897957	898012	898067	898122	55
791	898451	898506	898561	898615	898670	55
792	898999	899054	899109	899164	899218	55
793	89954 7	899602	899656	899711	899766	55
794	900094	900149	900203	900258	900312	55
795	900640	900695	900749	900804	900859	55
796	901186	901240	901295	901349	901404	55
797	901731	901785	901840	901894	901948	54
798	902275	902329	902384	902438	902492	54
799	902818	902873	902927	902981	903036	54

(353)

Log. 903. No. 800.

No.	0	1	2	3	4	Diff.
800 801 802 803 804	903090 903633 904174 904716 905256	903144 903687 904229 904770 905310	903199 903741 904283 904824 905364	903253 903795 904337 904878 905418	903307 903849 904391 904932 905472	54 54 54 54 54
805 806 807 808 809	905796 906335 906874 907411 907949	905850 906389 906927 907465 908002	905904 906443 906981 907519 908056	905958 906497 907035 907573 908110	906012 906551 907089 907626 908163	54 54 54 54 54
810 811 812 813 814	908485 909021 909556 910091 910624	908539 909074 909610 910144 910678	908592 909128 909663 910197 910731	908649 909181 909716 910251 910784	908699 909235 909770 910304 910838	54 54 53 53 53
815 816 817 818 819	911158 911690 912222 912753 913284	911211 911743 912275 912806 913337	911264 911797 912328 912859 913390	911317 911850 912381 912913 913443	911371 911903 912435 912966 913496	53 53 53 53 53 53
820 821 822 823 824	913814 914343 914872 915400 915927	913867 914396 914925 915453 915980	913920 914449 914977 915505 916033	913973 914502 915030 915558 916085	914026 914555 915083 915611 916138	53 53 53 53 53
825 826 827 828 829	916454 916980 917506 918030 918555	916507 917033 917558 918083 918607	916559 917085 917611 918135 918659	916612 917138 917663 918188 918712	916664 917190 917716 918240 918764	53 53 52 52 52 52
830 831 832 833 834	919078 919601 920123 920645 921166	919130 919653 920176 920697 921218	919183 919706 920228 920749 921270	919235 919758 920280 920801 921322	919287 919810 920332 920853 921374	52 52 52 52 52 52
835 836 837 838 839	921686 922206 922725 923244 923762	921738 922258 922777 923296 923814	921790 922310 922829 923348 923865	921842 922362 922881 923399 923917	921894 922414 922933 923451 923969	52 52 52 52 52 52
840 841 842 843 844	924279 924796 925312 925828 926342	924331 924848 925364 925879 926394	924383 924899 925415 925931 926445	924434 924951 925467 925982 926497	924486 925003 925518 926034 926548	52 52 52 51 51
845 846 847 848 849	926857 927370 927883 928396 928908	926908 927422 927935 928447 928959	926959 927473 927986 928498 929010	927011 927524 928037 928549 929061	927062 927576 928088 928601 929112	51 51 51 51

Log. 929. No. 849.

No.	5	6	7	8	9	Diff.
800	903361	903416	903470	903524	903578	54
801	903904	903958	904012	904066	904120	54
802	904445	904499	904553	904607	904661	54
803	904986	905040	905094	905148	905202	54
804	905526	905580	905634	905688	905742	54
805	906066	906119	906173	906227	906281	54
806	906604	906658	906712	906766	906820	54
807	907143	907196	907250	907304	907358	54
808	907680	907734	907787	907841	907895	54
809	908217	908270	908324	908378	908431	54
810	908753	908807	908860	908914	908967	54
811	909289	909342	909396	909449	909503	54
812	909823	909877	909930	909984	910037	53
813	910358	910411	910464	910518	910571	53
814	910891	910944	910998	911051	911104	53
815	911424	911477	911530	911584	911637	53
816	911956	912009	912063	912116	912169	53
817	912488	912541	912594	912647	912700	53
818	913019	913072	913125	913178	913231	53
819	913549	913602	913655	913708	913761	53
820	914079	914132	914184	914237	914290	53
821	914608	914660	914713	914766	914819	53
822	915136	915189	915241	915294	915347	53
823	915664	915716	915769	915822	915875	53
824	916191	916243	916296	916349	916401	53
825 826 827 828 829	916717 917243 917768 918293 918816	916770 917295 917820 918345 918869	916822 917348 917873 918397 918921	916875 917400 917925 918450 918973	916927 917453 917978 918502 919026	53 53 52 52 52 52
830 831 832 833 834	919340 919862 920384 920906 921426	919392 919914 920436 920958 921478	919444 919967 920489 921010 921530	919496 920019 920541 921062 921582	919549 920071 920593 921114 921634	52 52 52 52 52 52
835 836 837 838 839	921946 922466 922985 923503 924021	921998 922518 923037 923555 924072	922050 922570 923089 923607 924124	922102 922622 923140 923658 924176	922154 922674 923192 923710 924228	52 52 52 52 52 52
840	924538	924589	924641	924693	924744	52
841	925054	925106	925157	925209	925261	52
842	925570	925621	925673	925725	925776	52
843	926085	926137	926188	926240	926291	51
844	926600	926651	926702	926754	926805	51
845 846 847 848 849	927114 927627 928140 928652 929163	927165 927678 928191 928703 929215	92 7216 92 7730 928242 928754 929266	927268 927781 928293 928805 929317	927319 927832 928345 928857 929368	51 51 51 51

Log. 929. No. 850.

No.	0	1	2	3	4	Diff.
850 851 852 853 854	929419 929930 930440 930949 931458	929470 929981 930491 931000 931509	929521 930032 930542 931051 931560	929572 930083 930592 931102 931610	929623 930134 930643 931153 931661	51 51 51 51
855 856 857 858 859	931966 932474 932981 933487 933993	932017 932524 933031 933538 934044	932068 932575 933082 933589 934094	932118 932626 933133 933639 934145	932169 932677 933183 933690 934195	51 51 51 51
860	934498	934549	934599	934650	934700	50
861	935003	935054	935104	935154	935205	50
862	935507	935558	935608	935658	935709	50
863	936011	936061	936111	936162	936212	50
864	936514	936564	936614	936665	936715	50
865	937016	937066	937117	937167	937217	50
866	937518	937568	937618	937668	937718	50
867	938019	938069	938119	938169	938219	50
868	938520	938570	938620	938670	938720	50
869	939020	939070	939120	939170	939220	50
870	939519	939569	939619	939669	939719	50
871	940018	940068	940118	940168	940218	50
872	940516	940566	940616	940666	940716	50
873	941014	941064	941114	941163	941213	50
874	941511	941561	941611	941660	941710	50
875	942008	942058	942107	942157	942207	50
876	942504	942554	942603	942653	942702	50
877	943000	943049	943099	943148	943198	49
878	943495	943544	943593	943643	943692	49
879	943989	944038	944088	944137	944186	49
880	944483	944532	944581	944631	944680	49
881	944976	945025	945074	945124	945173	49
882	945469	945518	94556 7	945616	945665	49
883	945961	946010	946059	946108	946157	49
884	946452	946501	946551	946600	946649	49
885	946943	946992	947041	947090	947140	49
886	947434	947483	947532	947581	947630	49
887	947924	947973	948022	948070	948119	49
888	948413	948462	948511	948560	948609	49
889	948902	948951	948999	949048	949097	49
890	949390	949439	949488	949536	949585	49
891	949878	949926	949975	950024	950073	49
892	950365	950414	950462	950511	950560	49
893	950851	950900	950949	950997	951046	49
894	951338	951386	951435	951483	951532	49
895	951823	951872	951920	951969	952017	48
896	952308	952356	95240 5	952453	952502	48
897	952792	952841	952889	952938	952986	48
898	953276	953325	953373	953421	953470	48
899	953760	953808	953856	953905	953953	48

Log. 954. No. 899

No.	5	. 6	7	8	9	Diff.
850	929674	929725	929776	929827	929879	51
851	930185	930236	930287	930338	930389	51
852	930694	930745	930796	930847	930898	51
853	931204	931254	931305	931356	931407	51
854	931712	931763	931814	931865	931915	51
855	932220	932271	932322	932372	932423	51
856	932727	932778	932829	932879	932930	51
857	933234	933285	933335	933386	933437	51
858	933740	933791	933841	933892	933943	51
859	934246	934296	934347	934397	934448	51
860	934751	934801	934852	934902	934953	50
861	935255	935306	935356	935406	935457	50
862	935759	935809	935860	935910	935960	50
863	936262	936313	936363	936413	936463	50
864	936765	936815	936865	936916	936966	50
865	937267	937317	937367	937418	937468	50
866	937769	937819	937869	937919	937969	50
867	938269	938320	938370	938420	938470	50
868	938770	938820	938870	938920	938970	50
869	939270	939320	939369	939419	939469	50
870	939769	939819	939869	939918	939968	50
871	940267	940317	940367	940417	940467	50
872	940765	940815	940865	940915	940964	50
873	941263	941313	941362	941412	941462	50
874	941760	941809	941859	941909	941958	50
875	942256	942306	942355	942405	942455	50
876	942752	942801	942851	942901	942950	50
877	943247	943297	943346	943396	943445	49
878	943742	943791	943841	943890	943939	49
879	944236	944285	944335	944384	944433	49
880	944729	944779	944828	944877	944927	49
881	945222	945272	945321	945370	945419	49
882	945715	945764	945813	945862	945912	49
883	946207	946256	946305	946354	946403	49
884	946698	946747	946796	946845	946894	49
885 886 887 888 889	947189 947679 948168 948657 949146	947238 947728 948217 948706 949195	947287 947777 948266 948755 949244	947336 947826 948315 948804 949292	947385 947875 948364 948853 949341	49 49 49 49
890 891 892 893 894	949634 950121 950608 951095 951580	949683 950170 950657 951143 951629	949731 950219 950706 951192 951677	949780 950267 950754 951240 951726	949829 950316 950803 951289 951775	49 49 49 49
895 896 897 898 899	952066 952550 953034 953518 954001	952114 952599 953083 953566 954049	952163 952647 953131 953615 954098	952211 952696 953180 953663 954146	952260 952744 953228 953711 954194	48 48 48 48

Log. 954. No. 900.

No.	0	1	2	3	4	Diff.
900	954243	954291	954339	954387	954435	48
901	954725	954773	954821	954869	954918	48
902	955207	955255	955303	955351	955399	48
903	955688	955736	955784	955832	955880	48
904	956168	956216	956265	956313	956361	48
905	956649	956697	956745	956793	956840	48
906	957128	957176	957224	957272	957320	48
907	957607	957655	957703	957751	957799	48
908	958086	958134	958181	958229	958277	48
909	958564	958612	958659	958707	958755	48
910 911 912 913 914	959041 959518 959995 960471 960946	959089 959566 960042 960518 960994	959137 959614 960090 960566 961041	959185 959661 960138 960613 961089	959232 959709 960185 960661	48 48 48 48 47
915	961421	961469	961516	961563	961611	47
916	961895	961943	961990	962038	962085	47
917	962369	962417	962464	962511	962559	47
918	962843	962890	962937	962985	963032	47
919	963316	963363	963410	963457	963504	47
920	963788	963835	963882	963929	963977	47
921	964260	964307	964354	964401	964448	47
922	964731	964778	964825	9648 72	964919	47
923	965202	965249	965296	965343	965390	47
924	965672	965719	965766	965813	965860	47
925	966142	966189	966236	966283	966329	47
926	966611	966658	966705	9667 52	966799	47
927	967080	967127	967173	967220	967267	47
928	967548	967595	967642	967688	967735	47
929	968016	968062	968109	9681 56	968203	47
930	968483	968530	968576	968623	968670	47
931	968950	968996	969043	969090	969136	47
932	969416	969463	969509	969556	969602	47
933	969882	969928	969975	970021	970068	47
934	979347	970393	970440	970486	970533	46
935	970812	970858	970904	970951	970997	46
936	971276	971322	971369	971415	971461	46
937	971740	971786	971832	971879	971925	46
938	972203	972249	972295	972342	972388	46
939	972666	972712	972758	972804	972851	46
940	973128	973174	973220	973266	973313	46
941	973590	973636	973682	973728	973774	46
942	974051	974097	974143	974189	974235	46
943	974512	974558	974604	974650	974696	46
944	974972	975018	975064	975110	975156	46
945	975432	975478	975524	975570	975616	46
946	975891	975937	975983	976029	976075	46
947	976350	976396	976442	976488	976533	46
948	976808	976854	976900	976946	976992	46
949	977266	977312	977358	977403	977449	46

Log. 977. No. 949.

No.	5	6	7	8	9	Diff.	
900	954484	95453 ²	954580	954628	954677	48	
901	954966	955014	955062	955110	955158	48	
902	955447	955495	955543	955592	955640	48	
903	955928	955976	956024	956072	956120	48	
904	956409	956457	956505	956553	956601	48	
905	956888	956936	956984	957032	957080	48	
906	957368	957416	957464	957512	957559	48	
907	957847	957894	957942	957990	958038	48	
908	958325	958373	958421	958468	958516	48	
909	958803	958850	958898	958946	958994	48	
910	959280	959328	959375	959423	959471	48	
911	959757	959804	959852	959900	959947	48	
912	960233	960280	960328	960376	960423	48	
913	960709	960756	960804	960851	960899	48	
914	961184	961231	961279	961326	961374	47	
915	961658	961706	961753	961801	961848	47	
916	962132	962180	962227	962275	962322	47	
917	962606	962653	962701	962748	962795	47	
918	963079	963126	963174	963221	963268	47	
919	963552	963599	963646	963693	963741	47	
920	964024	964071	964118	964165	964212	47	
921	964495	964542	964590	964637	964684	47	
922	964966	965013	965061	965108	965155	47	
923	965437	965484	965531	965578	965625	47	
924	965907	965954	966001	966048	966095	47	
925	966376	966423	966470	966517	966564	47	
926	966845	966892	966939	966986	967033	47	
927	967314	967361	967408	967454	967501	47	
928	967782	967829	967875	967922	967969	47	
929	968249	968296	968343	968390	968436	47	
930	968716	968763	968810	968856	968903	47	
931	969183	969229	969276	969323	969369	47	
932	969649	969695	969742	969789	969835	47	
933	970114	970161	970207	970254	970300	47	
934	970579	970626	970672	970719	970765	46	
935	971044	971090	971137	971183	971229	46	
936	971508	971554	971601	971647	971693	46	
937	971971	972018	972064	972110	972157	46	
938	972434	972481	972527	972573	972619	46	
939	972897	972943	972989	973°35	973082	46	
940	973359	973405	973451	973497	973543	46	
941	973820	973866	973913	973959	974005	46	
942	974281	974327	974374	974420	974466	46	
943	974742	974788	974 ⁸ 34	974880	974926	46	
944	975202	975248	975 ² 94	975340	975386	46	
945 946 947 948 949	975662 976121 976579 977037 977495	9757°7 976167 976625 977083 977541	975753 976212 976671 977129 977586	975799 976258 976717 977175 977632	975845 976304 976763 977220 977678	46 46 46 46 46 46	

Log. 977. No. 950.

}	1					1
No.	0	1	2	3	4	Diff.
950	977724	977769	977815	977861	977906	46
951	978181	978226	978272	978317	978363	46
952	978637	978683	978728	978774	978819	46
953	979093	979138	979184	979230	979275	46
954	979548	979594	979639	979685	979730	46
955	980003	980049	980094	980140	980185	45
956	980458	980503	980549	980594	980640	45
957	980912	980957	981003	981048	981093	45
958	981366	981411	981456	981501	981547	45
959	981819	981864	981909	981954	982000	45
960	982271	982316	982362	982407	982452	45
961	982723	982769	982814	982859	982904	45
962	983175	983220	983265	983310	983356	45
963	983626	983671	983716	983762	983807	45
964	984077	984122	984167	984212	984257	45
965	984527	984572	984617	984662	984707	45
966	984977	985022	985067	985112	985157	45
967	985426	985471	985516	985561	985606	45
968	985875	985920	985965	986010	986055	45
969	986324	986369	986413	986458	986503	45
970	986772	986817	986861	985906	986951	45
971	987219	987264	987309	987353	987398	45
972	987666	987711	987756	987800	987845	45
973	988113	988157	988202	988247	988291	45
974	988559	988604	988648	988693	988737	45
975	989005	989049	989094	989138	989183	45
976	989450	989494	989539	989583	989628	44
977	989895	989939	989983	990028	9900 72	44
978	990339	990383	990428	990472	990516	44
979	990783	990827	990871	990916	990960	44
980	991226	991270	991315	991359	991403	44
981	991669	991713	991758	991802	991846	44
982	992111	992156	992200	992244	992288	44
983	992554	992598	992642	992686	992730	44
984	992995	993039	993083	993127	993172	44
985	993436	993480	993524	993568	993613	44
986	993 ⁸ 77	993921	993965	994009	994053	44
987	994317	994361	994495	994449	994493	44
988	994757	994801	994845	994889	994933	44
989	995196	995240	995284	995328	995372	44
990	995635	995679	995723	995767	995811	44
991	996074	996117	996161	996205	996249	44
992	996512	996555	996599	996643	996687	44
993	996949	996993	997037	997080	997124	44
994	997386	997430	997474	997517	997561	44
995	997823	997867	997910	997954	997998	44
996	998259	998303	998347	998390	998434	44
997	99869 5	998739	998782	998826	998869	44
998	999131	999174	999218	999261	999305	44
999	999565	999609	999652	999696	999739	43

Log. 999. No. 999.

No.	5	6	7	8	9	Diff.
950 951	977952 978409	977998 978454	978043	978089 978546	978135 978591	46 46
952	978865	978911	978956	979002	979047	46
953	979321	979366	979412	979457	979503	46
954	979776	979821	979867	979912	979958	46
955 956	980231	980276	980322	980367	980412	45
057	980685	980730 981184	980776 981229	980821 981275	980867 981320	45 45
958	981592	981637	981683	981728	981773	45
959	982045	982090	982135	982181	982226	45
960	982497	982543	982588	982633	982678	45
961 962	982949	982994	983040	983085	983130	45
953	983401 9838 5 2	983446 983897	983491 983942	983536 983987	983581 984032	45 45
964	984302	984347	984392	984437	984482	45 45
965	984752	984797	984842	984887	984932	45
966	985202	985247	985292	985337	985382	45
967 968	985651	985696	985741	985786	985830	45
969	986100 986548	986144 986593	986189 986637	986234 986682	986279 986727	45
970	986996	987040	987085			45
971	987443	987488	987532	987130 987577	98717 5 98762 2	45 45
972	987890	987934	987979	988024	988068	45
973	988336	988381	988425	988470	988514	45
974	988782	988826	988871	988916	988960	45
975 976	989227	989272 989717	989316	989361	989405	45
977	999072	999717	989761	989806	989850 990294	44 44
978	990561	990605	990650	990694	990738	44
979	991004	991049	991093	991137	991182	44
980	991448	991492	991536	991580	991625	44
981 982	991890	991935	991979	992023	992067	44
983	992333 992774	992377 992819	992421	992465	992509 992951	44 44
984	993216	993260	993304	993348	993392	44
985	993657	993701	993745	993789	993833	44
986 987	994097	994141	994185	994229	994273	44
988	994537 994977	994581 995021	994625	994669	994713	44
989	995416	995460	995065	995108	995152 995591	44 44
990	995854	995898	995942	995986	996030	44
991	996293	996337	996380	996424	996468	44
992	996731	996774	996818	996862	996906	44
993 994	997168 997605	997212 997648	997255	997299 997736	997343 997779	44 44
995	998041	998085	998129	998172	998216	44
996	998477	998521	998564	998608	998652	44
997 998	998913	998956	999000	999043	999087	44
998 999	999348	999392	999435	999479	999522	44
999	999783	999826	999870	999913	999957	43

	1 Y	ear			2 Years	S	
100 <i>i</i>	log (1+i)	$\log \frac{1}{a_1}$	Factor	$\log (1+i)^2$	$\log \frac{1}{a_o}$	Factor	100 <i>i</i>
1 2	0.002 1661 004 3214	0.002 1661 004 3214	232.0	0·004 332I 008 6427	ī·702 2177 705 4467	154·8 155·4	1 2
118 114 138 112	0.004 8585 005 3950 005 9309 006 4660	0.004 8585 005 3950 005 9309 006 4660	233·0 233·3 233·6 233·8	0.009 7171 010 7901 011 8617 012 9321	706 2510 707 0543 707 8561 708 6571	155·6 155·9 156·1 156·3	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$egin{array}{c} 1_{rac{5}{8}} \\ 1_{rac{3}{4}} \\ 1_{rac{7}{8}} \\ 2 \end{array}$	0.007 0006 007 5344 008 0676 008 6002	0.007 0006 007 5344 008 0676 008 6002	234·2 234·4 234·7 235·0	0.014 0011 015 0688 016 1352 017 2003	7:709 4567 710 2553 711 0527 711 8490	156·5 156·8 157·0 157·2	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.009 1321 009 6633 010 1939 010 7239	0.009 1321 009 6633 010 1939 010 7239	235·3 235·6 235·8 236·2	0.018 2641 019 3266 020 3878 021 4477	712 6441 713 4381 714 2309 715 0227	157·4 157·7 157·9 158·1	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$\begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	0.011 2532 011 7818 012 3098 012 8372	0.011 2532 011 7818 012 3098 012 8372	236·5 236·7 237·0 237·3	0.022 5063 023 5637 024 6197 025 6744	715 8133 716 6028 717 3912 718 1784	158·3 158·5 158·8 159·0	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
$\begin{array}{c} 3\frac{1}{8} \\ 3\frac{1}{4} \\ 3\frac{3}{8} \\ 3\frac{1}{2} \end{array}$	0.013 3640 013 8901 014 4155 014 9403	0.013 3640 013 8901 014 4155 014 9403	237·6 237·9 238·2 238·5	0.026 7279 027 7801 028 8310 029 8807	7:718 9645 719 7496 720 5335 721 3163	159·2 159·5 159·7 159·9	31 31 33 31 31 31
35 33 37 4	0.015 4645 015 9881 016 5110 017 0333	0.015 4645 015 9881 016 5110 017 0333	238·7 239·1 239·3 239·6	0.030 9291 031 9762 033 0221 034 0667	722 0980 722 8786 723 6581 724 4365	160·1 160·4 160·6 160·8	358 334 378 4
4½ 4½ 4½ 4½	0.017 5550 018 0761 018 5965 019 1163	0.017 5550 018 0761 018 5965 019 1163	239·9 240·2 240·5 240·8	0.035 1100 036 1521 037 1930 038 2326	725 2138 725 9901 726 7652 727 5393	161·0 161·3 161·5 161·7	41 41 43 41 42
45/8 43/4 47/8 5	0.019 6355 020 1540 020 6720 021 1893	0.019 6355 020 1540 020 6720 021 1893	241·1 241·3 241·6 241·9	0.039 2709 040 3081 041 3439 042 3786	ī·728 3123 729 0842 729 8550 730 6248	161·9 162·2 162·4 162·6	45 43 47 8 5
5 ¹ / ₈ 5 ¹ / ₄ 5 ³ / ₈ 5 ¹ / ₂	0.021 7060 022 2221 022 7376 023 2525	0.021 7060 022 2221 022 7376 023 2525	242·2 242·5 242·8 243·I	0.043 4120 044 4442 045 4752 046 5049	731 3934 732 1610 732 9275 733 6931	162·8 163·1 163·3 163·5	5½ 5½ 5½ 5½
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	0.023 7667 024 2804 024 7934 025 3059	0.023 7667 024 2804 024 7934 025 3059	243·3 243·7 243·9 244·4	0.047 5334 048 5608 049 5868 050 6117	735 2209 735 9832 736 7445	163·8 164·0 164·2 164·5	5 ⁵ / ₈ 5 ³ / ₈ 6
$\begin{array}{ c c c } 6\frac{1}{4} & 6\frac{1}{2} \\ 6\frac{3}{4} & 7 \\ \hline \end{array}$	0.026 3289 027 3496 028 3679 029 3838	0.026 3289 027 3496 028 3679 029 3838	244·9 245·5 246·1 246·7	0.052 6579 054 6992 056 7358 058 7676	738 2639 739 7792 741 2903 742 7972	165·0 165·4 165·9 166·3	6 ¹ / ₄ 6 ¹ / ₄ 7
$\begin{array}{c c} 7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8 \end{array}$	0.030 3973 031 4085 032 4173 033 4238	0.030 3973 031 4085 032 4173 033 4238	247·2 247·8 248·4 249·0	0.060 7946 062 8169 064 8346 066 8475	745 7988 747 2935 748 7843	166·8 167·3 167·7 168·2	7 ¹ / ₂ 7 ¹ / ₂ 7 ³ / ₄ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	0.034 4279 035 4297 036 4293 037 4265	0.034 4279 035 4297 036 4293 037 4265	249·5 250·1 250·7 251·3	0.068 8558 070 8595 072 8585 074 8530	ī·750 2708 751 7534 753 2321 754 7067	168·6 169·1 169·5 170·0	8½ 8½ 8¾ 9
9½ 9½ 9¾ 10	0.038 4214 039 4141 040 4045 041 3927	0.038 4214 039 4141 040 4045 041 3927	251·8 252·4 253·0	0.076 8429 078 8282 080 8091 082 7854	757 6442 759 1071 760 5660	170·4 170·9 171·4	9 ¹ / ₂ 9 ¹ / ₃ 10

	3 Y	ears	1		4 Years	S	
100 <i>i</i>	$\log (1+i)^3$	$\log \frac{1}{a_3}$	Factor	$\log (1+i)^4$	$\log \frac{1}{a_4}$	Factor	100 <i>i</i>
1	0·006 4982 012 9641	1·527 2073 531 5071	116.8	0·008 6642 017 2855	ī·403 3484 408 7166	93.14	122
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.014 5756 016 1851 017 7926 019 3981	1.532 5777 533 6465 534 7135 535 7787	117.0 117.2 117.3 117.5	0.019 4341 021 5801 023 7235 025 8642	1.410 0524 411 3858 412 7166 414 0449	93.75 93.93 94.11 94.27	18 14 18 14 18 12
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0.021 0017 022 6033 024 2029 025 8005	T·536 8422 537 9040 538 9640 540 0223	117·7 117·9 118·1 118·3	0.028 0022 030 1377 032 2705 034 4007	1.415 3709 416 6943 418 0154 419 3340	94·45 94·62 94·80 94·98	$ \begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array} $
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.027 3962 028 9900 030 5817 032 1716	T·541 0789 542 1337 543 1869 544 2383	118·5 118·7 118·9 119·1	0.036 5283 038 6533 040 7757 042 8955	1.420 6501 421 9639 423 2752 424 5842	95·14 95·33 95·49 95·68	21 21 23 23 21 21
$\begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	0.033 7595 035 3455 036 9295 038 5117	ī·545 2879 546 3359 547 3821 548 4267	119·3 119·5 119·9	0.045 0127 047 1273 049 2394 051 3489	1 425 8907 427 1949 428 4966 429 7959	95·84 96·03 96·21 96·38	258 234 278 3
$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$	0.040 0919 041 6702 043 2466 044 8210	7·549 4696 550 5108 551 5502 552 5881	120·1 120·3 120·4 120·6	0.053 4558 055 5602 057 6621 059 7614	7:431 0929 432 3876 433 6798 434 9697	96·55 96·73 96·91 97·09	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
$\begin{array}{c} 3\frac{5}{8} \\ 3\frac{3}{4} \\ 3\frac{7}{8} \\ 4 \end{array}$	0.046 3936 047 9643 049 5331 051 1000	T·553 6244 554 6588 555 6916 556 7228	120·8 121·0 121·2 121·4	0.061 8582 063 9524 066 0441 068 1334	1·436 2572 437 5425 438 8253 440 1059	97·25 97·44 97·61 97·79	358 334 378 4
4½ 4¼ 4¾ 4½ 4½	0.052 6650 054 2282 055 7895 057 3489	T·557 7522 558 7801 559 8063 560 8309	121.6 121.8 122.0 122.2	0.070 2201 072 3043 074 3860 076 4652	1·441 3841 442 6601 443 9337 445 2050	97·96 98·15 98·32 98·50	41 41 43 43 41 42
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	0.058 9064 060 4621 062 0159 063 5679	ī·561 8538 562 8751 563 8948 564 9128	122·4 122·6 122·8 123·0	0.078 5419 080 6161 082 6879 084 7572	1·446 4740 447 7406 449 0052 450 2673	98.69 98.85 99.04 99.21	458 434 478 5
5 ¹ / ₈ 5 ¹ / ₄ 5 ³ / ₈ 5 ¹ / ₂	0.065 1180 066 6663 068 2128 069 7574	T·565 9292 566 9440 567 9573 568 9688	123·2 123·4 123·6 123·8	0.086 8240 088 8884 090 9504 093 0098	1·451 5272 452 7848 454 0402 455 2933	99·40 99·57 99·75 99·93	518 514 518 512
5 ⁵ / ₈ 5 ³ / ₈ 5 ⁷ / ₈ 6	0.071 3002 072 8411 074 3803 075 9176	7·569 9788 570 9871 571 9939 572 9990	124·0 124·2 124·4 124·6	0.095 0669 097 1215 099 1737 101 2235	T·456 5442 457 7929 459 0394 460 2835	100·1 100·3 100·5	5\\\ 5\\\\ 5\\\\\ 5\\\\\ 5\\\\\\ 6
6½ 6½ 6¾ 7	0.078 9868 082 0488 085 1037 088 1513	7·575 0048 577 0041 578 9971 580 9838	125.0 125.4 125.8 126.2	0·105 3158 109 3984 113 4715 117 5351	I·462 7653 465 2382 467 7023 470 1578	101·1 101·5 101·8 102·2	61 61 63 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	0.091 1919 094 2254 097 2518 100 2713	ī·582 9644 584 9388 586 9071 588 8692	126.6 127.0 127.4 127.8	0·121 5892 125 6339 129 6691 133 6950	ī·472 6044 475 0425 477 4721 479 8930	102·5 102·9 103·3 103·6	7½ 7½ 7¾ 8
814 812 834 9	0·103 2837 106 2892 109 2878 112 2795	ī·590 8253 592 7753 594 7193 596 6573	128·2 128·6 129·0 129·4	0·137 7116 141 7190 145 7171 149 7060	T·482 3055 484 7095 487 1052 489 4926	104.0 104.4 104.7 105.1	81 81 83 83 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	0·115 2643 118 2424 121 2136 124 1781	7·598 5893 600 5155 602 4356 604 3501	129·8 130·2 130·6	0·153 6858 157 6565 161 6181 165 5707	ī·491 8715 494 2423 496 6048 498 9592	105·4 105·8 106·2	9½ 9½ 9¾ 10

	5 Y	ears		1:	6 Year	S	ES OI
100/	$\log (1+i)^5$	$\log \frac{1}{s_5}$	Factor	$\log (1 + \mathbf{i})^6$	$\log \frac{1}{a_6}$	Factor	100/
1 2	0.010 8303	7·307 5174 313 9511	77·72 78·12	0·012 9964 025 9282	Ī·229 4143 236 9109	66·70 67·08	12
11/4 11/4 11/2 11/2	0.024 2927 026 9752 029 6543 032 3302	7·315 5512 317 1481 318 7416 320 3319	78·28 78·44 78·60 78·76	0.029 1512 032 3702 035 5852 038 7963	1·238 7743 240 6337 242 4887 244 3395	67·23 67·39 67·54 67·69	1 1 1 1 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2
15 13 17 2	0.035 0028 037 6721 040 3381 043 0009	1·321 9189 323 5026 325 0831 326 6602	78·93 79·09 79·26 79·42	0.042 0034 045 2065 048 4057 051 6010	7·246 1862 248 0286 249 8669 251 7010	67·85 68·00 68·15 68·31	158 134 178 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.045 6603 048 3166 050 9696 053 6193	1·328 2342 329 8050 331 3725 332 9368	79·58 79·74 79·91 80·07	0.054 7924 057 9799 061 1635 064 3432	7·253 5310 255 3568 257 1786 258 9962	68·46 68·61 68·77 68·93	2½ 2¼ 2¾ 238 2½
25 23 27 8 3	0.056 2659 058 9092 061 5492 064 1861	1·334 4980 336 0559 337 6107 339 1623	80·24 80·40 80·56 80·72	0.067 5190 070 6910 073 8591 077 0233	1·260 8097 262 6192 264 4245 266 2258	69·08 69·24 69·39 69·55	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}	0.066 8198 069 4503 072 0776 074 7017	1·340 7108 342 2560 343 7982 345 3372	80.90 81.05 81.22 81.39	0.080 1838 083 3404 086 4931 089 6421	1.268 0230 269 8163 271 6056 273 3907	69·70 69·86 70·02 70·18	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
35 33 34 37 4	0.077 3227 079 9405 082 5552 085 1667	348 4059 349 9356 351 4622	81·55 81·72 81·88 82·05	0.092 7873 095 9286 099 0662 102 2000	7·275 1719 276 9492 278 7224 280 4916	70·33 70·49 70·65 70·81	358 334 378 4
41 41 42 42 41	0.087 7751 090 3803 092 9824 095 5815	1 ⋅352 9856 354 5062 356 0235 357 5378	82·20 82·38 82·55 82·72	0·105 3301 108 4564 111 5789 114 6977	ī·282 2570 284 0184 285 7758 287 5294	70·97 71·13 71·28 71·44	414 414 428 412
45 43 47 8 5	0.098 1774 100 7702 103 3599 105 9465	1·359 0490 360 5572 362 0624 363 5645	82.88 83.05 83.22 83.38	0·117 8128 120 9242 124 0318 127 1358	ī·289 2790 291 0249 292 7663 294 5047	71.60 71.78 71.91 72.08	45 43 47 5
5½ 5½ 5½ 5½	0·108 5300 111 1105 113 6879 116 2623	1·365 0637 366 5599 368 0531 369 5432	83·54 83·71 83·89 84·05	0·130 2361 133 3326 136 4255 139 5148	ī·296 2389 297 9692 299 6957 301 4185	72·24 72·40 72·56 72·73	5 1 5 1 5 3 8 5 1 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2
5\frac{5}{8}\$ 5\frac{3}{4}\$ 5\frac{7}{8}\$ 6	0·118 8336 121 4019 123 9671 126 5293	7·371 0304 372 5146 373 9959 375 4741	84·22 84·39 84·56 84·81	0·142 6003 145 6823 148 7605 151 8352	1.303 1373 304 8523 306 5636 308 2711	72·89 73·04 73·21 73·45	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6
61 61 63 7	0·131 6447 136 7480 141 8394 146 9189	1·378 4219 381 3580 384 2823 387 1952	85·15 85·49 85·83 86·17	0·157 9736 164 0976 170 2073 176 3027	ī·311 6748 315 0637 318 4376 321 7969	73.77 74.10 74.42 74.75	$\begin{array}{c} 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7 \end{array}$
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	0·151 9865 157 0423 162 0864 167 1188	ī·390 0966 392 9864 395 8650 398 7322	86.51 86.85 87.19 87.54	0·182 3838 188 4508 194 5037 200 5425	ī·325 1413 328 4711 331 7865 335 0874	75.08 75.41 75.74 76.07	7½ 7½ 7¾ 8
81 81 83 84 9	0·172 1395 177 1487 182 1463 187 1325	T·401 5882 404 4330 407 2667 410 0893	87.88 88.22 88.57 88.91	0·206 5674 212 5784 218 5756 224 5590	ī·338 3740 341 6463 344 9045 348 1486	76·40 76·73 77·06 77·40	8½ 8½ 8¾ 9
91 91 93 93 10	0·192 1072 197 0706 202 0226 206 9634	T·412 9010 415 7017 418 4916 421 2707	89·26 89·61 89·96	0·230 5287 236 4847 242 4272 248 3561	ī·351 3787 354 5949 357 7972 360 9859	77.73 78.07 78.40	9½ 9½ 9¾ 10

For explanation see pp. (60-80).

	7 Y	ears			3 Years	 S	
100 <i>i</i>	$\log (1+i)^7$	$\log \frac{1}{\bar{a}_7}$	Factor	$\log (1+i)^8$	$\log \frac{1}{a_8}$	Factor	100 <i>i</i>
1	0·015 1624 030 2496	ī·163 5447 172 1014	58·43 58·80	0·017 3285 034 5710	Ī·106 6290 116 2434	52·01 52·36	1
14 14 13 11 12	0.034 0097 037 7652 041 5161 045 2 623	ī·174 2274 176 3481 178 4635 180 5736	58·94 59·09 59·24 59·38	0.038 8683 043 1603 047 4469 051 7283	ī·118 6308 121 0118 123 3863 125 7545	52·50 52·64 52·78 52·93	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
$ \begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array} $	0.049 0039 052 7409 056 4734 060 2012	184 7783 186 8727 188 9621	59·53 59·68 59·83 59·98	0.056 0045 060 2753 064 5410 068 8014	130 4718 130 4718 132 8210 135 1638	53.07 53.35 53.50	$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.063 9245 067 6432 071 3574 075 0671	193 1253 195 1991 197 2680	60·13 60·28 60·42 60·57	0.073 0566 077 3065 081 5513 085 7909	ī·137 5004 139 8307 142 1548 144 4726	53.64 53.78 53.93 54.08	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.078 7722 082 4728 086 1689 089 8606	1·199 3316 201 3902 203 4438 205 4922	60·72 60·87 61·02 61·17	0.090 0254 094 2546 098 4788 102 6978	ī·146 7841 149 0896 151 3889 153 6819	54·22 54·36 54·51 54·66	$\begin{array}{c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$
3 1 3 1 3 3 8 3 1 2	0.093 5477 097 2304 100 9087 104 5824	1·207 5357 209 5741 211 6074 213 6359	61·32 61·48 61·62 61·77	0·106 9117 111 1205 115 3242 119 5228	Ī·155 9689 158 2498 160 5246 162 7932	54·80 54·95 55·10 55·24	3½ 3½ 3½ 3½ 3½
35/8 33/4 37/8 4	0·108 2518 111 9167 115 5773 119 2334	1·215 6594 217 6779 219 6915 221 7001	61.93 62.08 62.23 62.38	0·123 7163 127 9048 132 0883 136 2667	165 0560 167 3126 169 5632 171 8078	55·39 55·54 55·69 55·84	35 33 37 4
4½ 4½ 4¾ 4½ 4½	0·122 8851 126 5324 130 1754 133 8140	ī·223 7038 225 7026 227 6965 229 6856	62·54 62·69 62·84 63·00	0·140 4401 144 6085 148 7719 152 9303	ī·174 0465 176 2792 178 5060 180 7268	55.99 56.13 56.29 56.43	41 41 43 41 41
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	0·137 4483 141 0782 144 7038 148 3251	1·231 6698 233 6492 235 6238 237 5936	63·15 63·30 63·46 63·62	0·157 0838 161 2323 165 3758 169 5144	182 9419 185 1509 187 3542 189 5515	56·59 56·73 56·89 57·04	45 43 47 8 5
5 ¹ / ₈ 5 ¹ / ₄ 5 ³ / ₈ 5 ¹ / ₂	0·151 9421 155 5547 159 1631 162 7672	1·239 5585 241 5187 243 4741 245 4248	63·77 63·93 64·08 64·23	0·173 6481 177 7768 181 9007 186 0197	1.191 7431 193 9289 196 1089 198 2831	57·19 57·34 57·49 57·64	51 51 53 52 51
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	0·166 3671 169 9626 173 5540 177 1411	1·247 3708 249 3121 251 2487 253 1805	64·39 64·55 64·71 64·94	0 190 1338 194 2430 198 3474 202 4469	ī·200 4516 202 6144 204 7714 206 9228	57·80 57·95 58·10 58·33	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6
61 61 62 63 7	0·184 3026 191 4473 198 5752 205 6864	1·257 0302 260 8614 264 6741 268 4685	65·25 65·57 65·89	0·210 6315 218 7969 226 9431 235 0702	ī·211 2086 215 4718 219 7127 223 9312	58·64 58·95 59·26 59·57	61 61 63 7
$\begin{array}{c} 7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8 \end{array}$	0·212 7811 219 8593 226 9210 233 9663	1·272 2447 276 0027 279 7428 283 4649	66·52 66·84 67·17 67·49	0·243 1784 251 2677 259 3382 267 3900	Ī·228 1277 232 3023 236 4550 240 5861	59·89 60·20 60·52 60·83	7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8
8½ 8½ 8¾ 9	0·240 9953 248 0082 255 0049 261 9855	7·287 1694 290 8562 294 5254 298 1772	67·81 68·13 68·46 68·79	0·275 4232 283 4379 291 4341 299 4120	T·244 6956 248 7838 252 8508 256 8966	61·15 61·47 61·79 62·11	81 81 83 9
91 91 92 93 10	0·268 9501 275 8988 282 8317 289 7488	ī·301 8116 305 4288 309 0290 312 6121	69·11 69·44 69·77	0*307 3716 315 3130 323 2362 331 1415	7 260 9214 264 9255 268 9088 272 8716	62·44 62·76 63·09	91 91 93 10

[0 🗸	ears			GARITHMIC		ES OF
	1	1			O Year	S	1
100 <i>i</i>	$\log (1+i)^9$	$\log \frac{1}{\tilde{a}_9}$	Factor	$\log (1 + \mathbf{i})^{10}$	$\log \frac{1}{\mathbf{a}_{10}}$	Factor	100 <i>i</i>
12	0.019 4946 038 8924	ī·056 5518 067 2210	46 86 47.21	0.021 6606 043 2137	TOME 8688 023 5902	42·66 42·99	1 2
1 1 1 1 1 1 1 1 1 2 1 1 2 1 1 2 1 2 1 2	0.043 7268 048 5553 053 3778 058 1944	7.069 8690 072 5094 075 1418 077 7669	47·34 47·49 47·62 47·76	0.048 5853 053 9503 059 3087 064 6604	1.026 4978 029 3963 032 2858 035 1662	43·13 43·26 43·40 43·53	1 1 1 1 1 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1
$\begin{array}{ c c }\hline 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \\ \end{array}$	0.063 0050 067 8098 072 6086 077 4015	7.080 3842 082 9940 085 5962 088 1908	47.90 48.04 48.18 48.32	0.070 0056 075 3442 080 6762 086 0017	7.038 0376 040 9003 043 7538 046 5987	43.67 43.81 43.94 44.08	$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.082 1886 086 9699 091 7452 096 5148	093 3576 093 3576 095 9297 098 4945	48·46 48·60 48·74 48·88	0.091 3207 096 6332 101 9391 107 2387	7.049 4346 052 2617 055 0801 057 8895	44·21 44·35 44·49 44·63	2½ 2¼ 2¾ 2¾ 2½
25 23 27 8 3	0·101 2785 106 0365 110 7886 115 5350	101 0519 103 6017 106 1443 108 6795	49.02 49.16 49.31 49.45	0·112 5317 117 8183 123 0985 128 3722	7.060 6903 063 4824 066 2659 069 0407	44.77 44.91 45.05 45.19	25 23 27 27 3
3½ 3¼ 3¾ 3½ 3½	0·120 2757 125 0105 129 7397 134 4631	T·III 2074 113 7280 116 2414 118 7474	49·59 49·73 49·88 50·02	0·133 6396 138 9006 144 1552 149 4035	7.071 8068 074 5643 077 3134 080 0539	45.33 45.47 45.61 45.75	31/4 31/4 33/8 31/2
358 334 378 4	0 139 1809 143 8929 148 5993 153 3001	121 2462 123 7379 126 2223 128 6997	50·17 50·31 50·46 50·61	0·154 6454 159 8811 165 1104 170 3334	7.082 7859 085 5094 088 2245 090 9312	45.90 46.04 46.18 46.33	35 334 378 4
4½ 4¼ 4¾ 4½ 4½	0·157 9951 162 6846 167 3684 . 172 0466	ī·131 1698 133 6329 136 0889 138 5379	50·75 50·90 51·04 51·19	0·175 5501 180 7606 185 9649 191 1629	7 · 093 6295 096 3194 099 0010 101 6743	46·47 46·61 46·76 46·90	418 414 438 412
45 43 47 8 5	0·176 7192 181 3863 186 0478 190 7037	ī·140 9798 143 4146 145 8426 148 2635	51·34 51·48 51·63 51·78	0·196 3547 201 5403 206 7197 211 8930	104 3393 106 9961 109 6448 112 2851	47.05 47.19 47.34 47.49	45 43 47 5
5½ 5¼ 5½ 5½	0·195 3541 199 9989 204 6383 209 2721	ī·150 6775 153 0845 155 4848 157 8781	51·93 52·08 52·23 52·38	0·217 0601 222 2210 227 3759 232 5246	T·114 9173 117 5415 120 1575 122 7654	47.63 47.78 47.93 48.08	5\frac{1}{8} 5\frac{1}{4} 5\frac{3}{8} 5\frac{1}{2}
558 534 578 6	0·213 9005 218 5234 223 1408 227 7528	T·160 2645 162 6441 165 0170 167 3830	52·53 52·68 52·83 53·06	0·237 6672 242 8038 247 9342 253 0587	Ī·125 3653 127 9572 130 5411 133 1171	48·23 48·38 48·52 48·75	55 534 57 6
61 61 63 7	0·236 9604 246 1465 255 3110 264 4540	ī·172 0949 176 7799 181 4383 186 0701	53·36 53·67 53·97 54·28	0·263 2894 273 4961 283 6788 293 8378	ī·138 2452 143 3418 148 4071 153 4414	49.05 49.36 49.66 49.97	61 62 63 7
7½ 7½ 7¾ 8	0·273 5757 282 6762 291 7555 300 8138	ī·190 6757 195 2551 199 8086 204 3363	54·59 54·90 55·22 55·53	0·303 9730 314 0846 324 1728 334 2376	ī·158 4448 163 4176 168 3600 173 2722	50·27 50·58 50·89 51·21	7½ 7½ 7¾ 8
81 81 81 82 83 9	0·309 8511 318 8676 327 8634 336 8385	T·208 8384 213 3151 217 7665 222 1929	55.84 56.16 56.48 56.80	0·344 2791 354 2974 364 2927 374 2650	183 0069 187 8299 192 6235	51·52 51·83 52·15 52·47	81 81 83 83 9
91 91 93 93 10	0·345 7930 354 7271 363 6408 372 5342	T·226 5944 230 9711 235 3233 239 6511	57·12 57·44 57·77	0·384 2145 394 1412 404 0453 413 9269	ī·197 3879 202 1235 206 8304 211 5087	52·79 53·11 53·44	91 91 92 93 10

For explanation see pp. (60-80).

	11 7	Tears		1	2 Year	rs	
100 <i>i</i>	$\log (1+i)^{11}$	log 1 a 11	Factor	$\log (1+i)^{12}$	log 1	Factor	100 <i>i</i>
12	0·023 8267 047 5351	2·971 5497 984 3206	39.15	0·025 9927 051 8565	2·934 8338 948 6515	36.19	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.053 4439 059 3454 065 2395 071 1265	2·987 4868 990 6426 993 7877 996 9223	39.61 39.74 39.88 40.01	0.058 3024 064 7404 071 1704 077 5925	2·952 0754 955 4873 958 8869 962 2745	36.64 36.77 36.90 37.03	1½ 1¼ 1¾ 1½
158 134 178 2	0.077 0061 082 8786 088 7438 094 6019	7.000 0466 003 1604 006 2640 009 3571	40·14 40·28 40·41 40·54	0.084 0067 090 4130 096 8115 103 2021	2·965 6502 969 0139 972 3658 975 7056	37·16 37·29 37·43 37·56	$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}$
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·100 4528 106 2965 112 1331 117 9625	015 5127 018 5751 021 6273	40.68 40.82 40.95 41.09	0·109 5848 115 9598 122 3270 128 6864	2·979 0337 982 3500 985 6546 988 9473	37.69 37.83 37.96 38.10	$2\frac{1}{6}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$egin{array}{c} 2rac{5}{8} \ 2rac{3}{4} \ 2rac{7}{8} \ 3 \ \end{array}$	0·123 7849 129 6001 135 4083 141 2095	1.024 6694 027 7014 030 7233 033 7351	41·23 41·36 41·64	0·135 0380 141 3820 147 7182 154 0467	2·992 2285 995 4979 998 7558 1·002 0022	38·23 38·37 38·50 38·64	25 23 27 27 3
3½ 3¼ 3½ 3½ 3½	0·147 0036 152 7907 158 5707 164 3438	7.036 7369 039 7287 042 7106 045 6827	41.78 41.92 42.06 42.20	0·160 3675 166 6807 172 9863 179 2842	1.005 2370 008 4604 011 6724 014 8730	38·78 38·92 39·06 39·19	31/8 31/4 32/8 31/2
$\begin{array}{ c c c }\hline 3\frac{5}{8} \\ 3\frac{3}{4} \\ 3\frac{7}{8} \\ 4 \\ \end{array}$	0·170 1100 175 8692 181 6214 187 3667	T·048 6447 051 5971 054 5396 057 4723	42·34 42·48 42·62 42·77	0·185 5745 191 8573 198 1324 204 4001	I·018 0622 021 2402 024 4069 027 5623	39·33 39·47 39·61 39·75	358 334 377 4
4½ 4¼ 4¾ 43 4½	0·193 1052 198 8367 204 5614 210 2792	Ī·060 3952 063 3085 066 2122 069 1061	42.91 43.05 43.19 43.34	0·210 6602 216 9128 223 1579 229 3955	ī·o3o 7066 o33 8397 o36 9618 o4o 0727	39·90 40·04 40·18 40·32	414 414 428 412
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	0·215 9902 221 6943 227 3917 233 0823	7.071 9905 074 8653 077 7307 080 5865	43·48 43·62 43·77 43·92	0·235 6257 241 8484 248 0637 254 2716	T·043 1727 046 2617 049 3397 052 4070	40·47 40·61 40·75 40·90	458 434 478 5
5 1 4 3 8 5 1 2 5 1 2	0·238 7661 244 4431 250 1135 255 7771	ī·083 4327 086 2697 089 0972 091 9153	44.06 44.21 44.36 44.50	0·260 4721 266 6653 272 8511 279 0295	T·055 4632 058 5087 061 5434 064 5675	41·04 41·19 41·33 41·49	5½ 5½ 5½ 5½
558 534 578 6	0·261 4339 267 0841 272 7277 278 3645	Ī·094 7242 097 5237 100 3141 103 0950	44.65 44.80 44.95 45.17	0·285 2007 291 3645 297 5211 303 6704	7.067 5806 070 5833 073 5753 076 5568	41.63 41.78 41.93 42.15	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	0·289 6183 300 8457 312 0467 323 2216	ī 108 6297 114 1277 119 5896 125 0156	45.47 45.77 46.07 46.38	0·315 9473 328 1953 340 4146 352 6053	T·082 4881 088 3777 094 2258 100 0326	42·45 42·75 43·05 43·36	6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7
7½ 7½ 7¾ 8	0·334 3703 345 4931 356 5901 367 6613	Ī·130 4057 135 7605 141 0801 146 3648	46.69 47.31 47.62	0·364 7676 376 9016 389 0073 401 0851	Ī·105 7986 111 5240 117 2093 122 8546	43·67 43·97 44·28 44·60	$ \begin{array}{c c} 7_{\frac{1}{4}} \\ 7_{\frac{1}{2}} \\ 7_{\frac{3}{4}} \\ 8 \end{array} $
81 81 82 83 9	0·378 7070 389 7271 400 7219 411 6915	1·151 6148 156 8305 162 0120 167 1598	47.93 48.25 48.56 48.89	0.413 1349 425 1569 437 1512 449 1180	ī·128 4603 134 0267 139 5542 145 0429	44.91 45.23 45.55 45.87	$8\frac{1}{4}$ $8\frac{1}{2}$ $8\frac{3}{4}$ 9
9½ 9½ 9¾ 10	0·422 6359 433 5553 444 4498 455 3195	Ī·172 2738 177 3544 182 4020 187 4168	49.21 49.53 49.85	0.461 0573 472 9694 484 8543 496 7122	Ī·150 4934 155 9057 161 2804 166 6175	46·19 46·51 46·84	91 91 92 93 10

	13 Y	Zears		1	4 Year	's	
100 <i>i</i>	$\log \left(1+\boldsymbol{i}\right)^{13}$	$\log \frac{1}{\hat{a}_{13}}$	Factor	$\log (1+I)^{14}$	$\log \frac{1}{\tilde{a}_{14}}$	Factor	100 <i>i</i>
1	0.028 1588 056 1779	2·901 1435 916 0053	33.64	0·030 3249 060 4992	2·870 0297 885 9330	31·44 31·75	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.063 1610 070 1354 077 1013 084 0585	2·919 6860 923 3527 927 0059 930 6452	34·09 34·22 34·35 34·48	0.068 0195 075 5304 083 0321 090 5246	2·889 8695 893 7904 897 6956 901 5854	31.88 32.01 32.14 32.26	18 14 13 12
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{3} \\ 2 \end{array}$	0.091 0073 097 9474 104 8791 111 8022	2·934 2709 937 8829 941 4814 945 0663	34.61 34.74 34.87 35.00	0.098 0078 105 4819 112 9467 120 4024	2·905 4597 909 3186 913 1621 916 9905	32·39 32·52 32·65 32·78	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·118 7169 125 6231 132 5209 139 4103	2·948 6378 952 1958 955 7404 959 2717	35·13 35·26 35·40 35·53	0·127 8490 135 2864 142 7148 150 1341	2·920 8035 924 6013 928 3840 932 1516	33.31 33.02 33.18	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$\begin{array}{c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	0·146 2912 153 1638 160 0280 166 8839	2·962 7897 966 2944 969 7860 973 2643	35.67 35.80 35.94 36.07	0·157 5444 164 9456 172 3379 179 7211	2·935 9042 939 6419 943 3646 947 0725	33·44 33·58 33·71 33·85	25 23 27 27 3
3½ 3½ 3½ 3½ 3½	0·173 7315 180 5708 187 4018 194 2245	2·976 7296 980 1818 983 6211 987 0474	36·21 36·34 36·48 36·62	0·187 0955 194 4608 201 8173 209 1649	2·950 7656 954 4439 958 1076 961 7567	33 98 34·12 34·26 34·39	3½ 3¼ 3½ 3½ 3½
35 33 37 4 4	0·20I 039I 207 8454 214 6435 22I 4334	2·990 4607 993 8612 997 2488 1·000 6238	36·76 36·90 37·04 37·18	0.216 5036 223 8335 231 1545 238 4668	2·965 3911 969 0111 972 6165 976 2077	34·53 34·67 34·81 34·95	35 334 378 4
4½ 4¼ 4¾ 4½	0·228 2152 234 9888 241 7544 248 5118	1.003 9860 007 3355 010 6723 013 9967	37·32 37·46 37·60 37·74	0.245 7702 253 0649 260 3508 267 6281	2·979 7844 983 3469 986 8951 990 4291	35·09 35·23 35·37 35·51	41 41 48 42 42
45 43 47 8 5	0·255 2611 262 0024 268 7357 275 4609	7.017 3084 020 6078 023 8947 027 1692	37·89 38·03 38·17 38·32	0·274 8966 282 1564 289 4076 296 6502	2·993 9489 997 4547 1·000 9466 004 4244	35.66 35.80 35.94 36.09	458 434 4778 5
5½ 5¼ 5¾ 5½ 5½	0·282 1781 288 8874 295 5886 302 2820	030 4314 033 6813 036 9189 040 1442	38·46 38·61 38·76 38·90	0·303 8841 311 1095 318 3262 325 5344	ī·007 8884 011 3385 014 7748 018 1973	36·23 36·38 36·52 36·67	5½ 5½ 5½ 5½
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	0·308 9674 315 6449 322 3145 328 9762	ī·043 3576 046 5588 049 7479 052 9252	39.05 39.20 39.34 39.57	0·332 7341 339 9253 347 1079 354 2821	1 ·021 6062 025 0015 028 3832 031 7513	36·82 36·96 37·11 37·34	5\\\ 5\\\ 5\\\ 5\\\ 5\\\ 6\\ 6\\
6½ 6½ 6¾ 7	0·342 2762 355 5449 368 7825 381 9891	7.059 2436 065 5146 071 7386 077 9158	39·87 40·17 40·47 40·78	0·368 6051 382 8945 397 1504 411 3729	1 038 4473 045 0901 051 6797 058 2170	37.63 37.94 38.24 38.55	6 ¹ / ₄ 6 ¹ / ₄ 6 ³ / ₄ 7
7¼ 7½ 7¾ 8	0·395 1649 408 3100 421 4246 434 5088	Ī·084 0467 090 1317 096 1712 102 1654	41.08 41.39 41.71 42.02	0·425 5622 439 7185 453 8419 467 9326	7064 7021 071 1356 077 5179 083 8495	38·86 39·17 39·48 39·80	7½ 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	0·447 5628 460 5866 473 5805 486 5445	ī·108 1148 114 0197 119 8806 125 6977	42·34 42·66 42·98 43·30	0.481 9907 496 0163 510 0097 523 9710	Ī·090 1308 096 3623 102 5442 108 6772	40·12 40·44 40·76 41·09	81 81 82 83 4 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	0·499 4788 512 3835 525 2589 538 1049	ī·131 4715 137 2023 142 8905 148 5364	43.62 43.95 44.28	0·537 9002 551 7977 565 6634 579 4976	ī·114 7616 120 7979 126 7865 132 7277	41·42 41·75 42·08	9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10

For explanation see pp. (60-80)

	15 7	Tears			6 Year	.s	
1001	$\log \left(1+\boldsymbol{i}\right)^{15}$	$\log \frac{1}{\tilde{a}_{15}}$	Factor	$\log \left(1+\boldsymbol{i}\right)^{16}$	$\log \frac{1}{\tilde{s}_{16}}$	Factor	100/
1 1 2	0.032 4909 064 8206	2·841 1364 858 0785	29·51 29·82	0·034 6570 069 1420	2·814 1767 832 1549	27.81	1 2
14 14 130 112	0.072 8780 080 9255 088 9630 096 9906	2·862 2698 866 4436 870 6000 874 7389	29·95 30·07 30·20 30·33	0.077 7366 086 3205 094 8939 103 4567	2·836 6002 841 0260 845 4322 849 8190	28·24 28·37 28·49 28·62	1 1 1 1 3 8 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
158 124 178 2	0·105 0084 113 0163 121 0143 129 0026	2·878 8605 882 9648 887 0519 891 1217	30·46 30·58 30·71 30·84	0·112 0089 120 5507 129 0819 137 6027	2·854 1864 858 5347 862 8636 867 1735	28.75 28.88 29.00 29.13	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
2½ 2¼ 2¾ 2¾ 2½	0·136 9810 144 9498 152 9087 160 8580	2·895 1746 899 2103 903 2291 907 2311	30·97 31·10 31·23 31·37	0·146 1131 154 6131 163 1026 171 5818	2·871 4643 875 7361 879 9890 884 2230	29·26 29·39 29·52 29·65	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
25/8 23/4 27/8 3	0·168 7976 176 7275 184 6477 192 5584	2·911 2161 915 1844 919 1359 923 0708	31.50 31.63 31.77 31.90	0·180 0507 188 5093 196 9576 205 3956	2·888 4383 892 6351 896 8129 900 9723	29·78 29·92 30·05 30·19	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3½ 3½ 3½	0·200 4594 208 3509 216 2328 224 1052	2·926 9891 930 8908 934 7762 938 6451	32·04 32·17 32·31 32·45	0·213 8234 222 2410 230 6484 239 0456	2·905 1132 909 2357 913 3399 917 4258	30·32 30·46 30·59 30·73	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
35 34 37 4	0·231 9682 239 8216 247 6656 255 5001	2·942 4977 946 3340 950 1542 953 9582	32·58 32·72 32·86 33·00	0·247 4327 255 8097 264 1766 272 5334	2·921 4936 925 5432 929 5749 933 5 ⁸⁸ 5	30·87 31·00 31·14 31·28	358 334 378 4
41 41 43 41 42	0·263 3252 271 1410 278 9473 286 7444	2·957 7461 961 5180 965 2740 969 0141	33·14 33·28 33·42 33·56	0·280 8802 289 2170 297 5438 305 8606	2·937 5843 941 5622 945 5224 949 4650	31·42 31·56 31·70 31·85	$4\frac{1}{8}$ $4\frac{1}{4}$ $4\frac{3}{8}$ $4\frac{1}{2}$
45/8 43/4 47/8 5	0·294 5321 302 3105 310 0796 317 8395	2·972 7383 976 4469 980 1397 983 8170	33·71 33·85 33·99 34·14	0·314 1675 322 4645 330 7516 339 0288	2·953 3899 957 2973 961 1875 965 0601	31·99 32·13 32·28 32·42	45 43 47 5
5½ 5½ 5½ 5½ 5½	0·325 5901 333 3316 341 0638 348 7869	2·987 4786 991 1248 994 7554 998 3709	34·28 34·43 34:57 34·72	0·347 2961 355 5537 363 8014 372 0394	2·968 9155 972 7536 976 5746 980 3786	32·57 32·71 32·86 33·01	5 1 4 3 8 1 2 5 1
5 5 3 4 5 7 8 6	0·356 5008 364 2056 371 9013 379 5880	7.001 9710 005 5560 009 1255 012 6801	34·87 35·02 35·17 35·39	0·380 2676 388 4860 396 6948 404 8938	2·984 1655 987 9356 991 6888 995 4252	33·16 33·30 33·45 33·68	55 534 578 6
61 61 63 63 7	0·394 9341 410 2441 425 5183 440 7567	Ī·019 7443 026 7488 033 6943 040 5810	35.69 35.99 36.30 36.61	0·421 2630 437 5937 453 8861 470 1404	T·002 8480 010 2048 017 4960 024 7223	33·98 34·29 34·60 34·91	61 61 63 63 7
71/2 71/2 73/4 8	0.455 9595 471 1270 486 2592 501 3563	T·ó47 4098 054 1810 060 8951 067 5527	36·92 37·24 37·55 37·87	0.486 3568 502 5354 518 6765 534 7801	031 8841 038 9822 046 0172 052 9895	35·22 35·54 35·86 36·18	7½ 7½ 7¾ 8
81 81 82 83 9	0·516 4186 531 4461 546 4390 561 3975	080 7003 087 1913 093 6278	38·19 38·51 38·84 39·17	0.550 8465 566 8758 582 8682 598 8240	Ī·059 9000 066 7490 073 5372 080 2653	36·50 36·83 37·16 37·49	81 81 81 83 83 9
91 91 92 93 10	0·576 3217 591 2118 606 0679 620 8903	ī·100 0104 106 3395 112 6156 118 8391	39·50 39·83 40·17	0.614 7431 630 6259 646 4725 662 2830	ī·086 9338 093 5432 100 0942 106 5873	37·82 38·16 38·50	9½ 9½ 9¾ 10

25 (369)

	17 7	Tears	la de la companya de		.8 Year	. S	S OF
100 <i>j</i>	$\log (1 + \mathbf{i})^{17}$	$\log \frac{1}{\bar{a}_{1}}$	Factor	$\log\left(1+i\right)^{18}$	$\log \frac{1}{a_{18}}$	Factor	1001
1 1 2	0·036 8231 073 4634	2·788 9161 807 9276	26·30 26·61	0.038 9891 077 7847	2·765 1597 785 2021	24.95	1 2
$\begin{array}{ c c c }\hline 1_{8}^{1} \\ 1_{4}^{1} \\ 1_{8}^{3} \\ 1_{2}^{1} \\ \end{array}$	0.082 5951 091 7155 100 8247 109 9227	2·812 6258 817 3024 821 9574 826 5908	26·73 26·85 26·98 27·10	0.087 4536 097 1106 106 7556 116 3888	795 0787 795 0787 799 9812 804 8600	25·37 25·50 25·62 25·75	1± 1± 1± 1± 1± 1± 1±
15 13 17 2	0·119 0095 128 0851 137 1496 146 2029	35 7935 840 3628 844 9109	27·23 27·36 27·48 27·61	0·126 0101 135 6195 145 2172 154 8031	2·809 7152 814 5467 819 3549 824 1395	25.87 26.00 26:13 26.25	158 134 178 2
$egin{array}{c} 2rac{1}{8} \ 2rac{1}{4} \ 2rac{3}{8} \ 2rac{1}{2} \ \end{array}$	0·155 2452 164 2764 173 2966 182 3057	2·849 4379 853 9438 858 4288 862 8929	27·74 27·87 28·00 28·13	0·164 3773 173 9397 183 4905 193 0296	2·828 9009 833 6392 838 3542 843 0463	26·38 26·51 26·64 26·77	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25 23 27 8 3	0·191 3039 200 2911 209 2674 218 2328	2·867 3361 871 7589 876 1609 880 5422	28·26 28 40 28·53 28·66	0·202 5571 212 0729 221 5773 231 0700	2·847 7155 852 3618 856 9854 861 5864	26·90 27·04 27·17 27·30	25 23 27 27 3
$\begin{array}{c c} 3\frac{1}{8} \\ 3\frac{1}{4} \\ 3\frac{3}{8} \\ 3\frac{1}{2} \end{array}$	0·227 1873 236 1310 245 0639 253 9859	2·884 9032 889 2438 893 5640 897 8642	28·80 28·93 29·07 29·21	0.240 5513 250 0211 259 4794 268 9263	2·866 1647 870 7207 875 2543 879 7657	27·44 27·57 27·71 27·84	3½ 3¼ 38 3½ 32
35 38 37 4	0·262 8972 271 7978 280 6876 289 5668	2·902 1442 906 4040 910 6439 914 8640	29·34 29·48 29·62 29·76	0·278 3618 287 7859 297 1987 306 6001	2·884 2549 888 7220 893 1672 897 5904	27·98 28·12 28·26 28·40	35 33 37 4
41 41 42 42 42	0·298 4352 307 2931 316 1403 324 9769	2·919 0643 923 2448 927 4058 931 5473	29·90 30·04 30·18 30·33	0·315 9903 325 3691 334 7368 344 0932	2·901 9919 906 3717 910 7300 915 0667	28·54 28·68 28·82 28·97	41 41 43 41 42
458 434 478 5	0·333 8030 342 6185 351 4236 360 2181	2·935 6693 939 7719 943 8553 947 9194	30·47 30·61 30·76	0·353 4385 362 7726 372 0955 381 4074	2·919 3821 923 6761 927 9491 932 2008	29·11 29·25 29·40 29·55	458 434 478 5
5½ 5¼ 5½ 5½	0·369 0021 377 7758 386 5390 395 2918	2·951 9644 955 9905 959 9976 963 9859	31·05 31·19 31·34 31·49	0·390 7082 399 9979 409 2766 418 5443	2·936 4316 940 6415 944 8307 948 9991	29.69 29.84 29.99 30.14	5½ 5½ 5½ 5½
5\frac{5}{4} 5\frac{7}{8} 6	0·404 0343 412 7664 421 4882 430 1997	2·967 9554 971 9062 975 8385 979 7523	31.64 31.79 31.94 32.17	0·427 8010 437 0468 446 2816 455 5056	2·953 1468 957 2742 961 3811 965 4677	30·29 30·44 30·59 30·82	55 53 57 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	0·447 5920 464 9433 482 2540 499 5242	2·987 5247 995 2241 1·002 8512 010 4068	32·47 32·78 33·09 33·40	0°473 9209 492 2929 510 6219 528 9080	2·973 5803 981 6130 989 5665 997 4414	31·12 31·43 31·75 32·06	6½ 6¾ 7
7½ 7½ 7¾ 8	0·516 7541 533 9439 551 0937 568 2038	Ī·017 8915 025 3060 032 6510 039 9272	33.72 34.04 34.36 34.68	0·547 1514 565 3524 583 5110 601 6276	7.005 2388 012 9593 020 6038 028 1729	32·38 32·70 33·03 33·36	74 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	0.585 2744 602 3055 619 2975 636 2505	ī 047 1352 054 2758 061 3497 068 3574	35.01 35.34 35.68 36.01	0·619 7023 637 7353 655 7268 673 6770	1.035 6677 043 0887 050 4368 057 7128	33.69 34.02 34.36 34.70	81 81 83 83 9
9½ 9½ 9¾ 10	0.653 1646 670 0400 686 8770 703 6756	7.075 2999 082 1776 088 9912 095 7415	36·35 36·69 37·04	0·691 5860 709 4541 727 2815 745 0683	7.064 9175 072 0516 079 1160 086 1114	35.04 35.39 35.74	9½ 9½ 9¾ 10

For explanation see pp. (60-80).

	19 7	Tears		2	20 Year	rs	
100/	$\log (1+i)^{19}$	$\log \frac{1}{\hat{a}_{19}}$	Factor	$\log (1+i)^{20}$	$\log \frac{1}{a_{20}}$	Factor	100 <i>i</i>
1	0.041 1552 082 1061	2·742 7450 763 8154	23.73	0.043 3212 086 4275	2·721 5341 743 6298	22.63	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.092 3122 102 5056 112 6865 122 8548	774 1919 779 3409 784 4637	24·15 24·28 24·40 24·52	0.097 1707 107 9006 118 6173 129 3208	754 5041 759 8985 765 2642	23·05 23·17 23·30 23·42	1 1 1 1 1 1 1 1 2 1 1 2 1 2 1 2 1 2 1 2
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·133 0106 143 1539 153 2848 163 4033	2·789 5607 794 6317 799 6769 804 6966	24.65 24.78 24.90 25.03	0·140 0112 150 6884 161 3524 172 0034	775 9104 781 1914 786 4442	23·55 23·67 23·80 23·92	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{3}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·173 5093 183 6030 193 6844 203 7534	\$\overline{2} \cdot 809 \\ 6592 \\ 819 \\ 6024 \\ 824 \\ 5204 \end{array}\$	25·16 25·29 25·42 25·55	0·182 6414 193 2663 203 8783 214 4773	2·791 6690 796 8661 802 0355 807 1772	24.05 24.18 24.31 24.44	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{9} \\ 2\frac{1}{2} \end{array}$
$\begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{3} \\ 3 \end{array}$	0·213 8102 223 8548 233 8871 243 9073	2·829 4131 834 2809 839 1238 843 9418	25.68 25.81 25.94 26.08	0·225 0634 235 6366 246 1970 256 7445	2·812 2915 817 3785 822 4382 827 4708	24·57 24·71 24·84 24·97	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3¼ 3¾ 3½ 3½	0·253 9153 263 9111 273 8949 283 8666	2·848 7351 853 5037 858 2480 862 9678	26·21 26·35 26·48 26·62	0·267 2792 277 8012 288 3105 298 8070	2·832 4765 837 4551 842 4071 847 3325	25·11 25·24 25·38 25·52	3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
35 33 37 37 4	0·293 8263 303 7740 313 7097 323 6334	2·867 6632 872 3345 876 9817 881 6050	26·76 26·90 27·04 27·18	0·309 2909 319 7621 330 2207 340 6668	2·852 2313 857 1038 861 9501 866 7702	25.65 25.79 25.93 26.07	35 34 37 8 4
41 41 43 42 42	0·333 5453 343 4452 353 3333 363 2095	2·886 2044 890 7801 895 3321 899 8607	27·32 27·46 27·60 27·75	0·351 1003 361 5213 371 9298 382 3258	2·871 5642 876 3324 881 0748 885 7916	26·22 26·36 26·50 26·65	418 444 438 412
45 43 47 5	0·373 0739 382 9266 392 7675 402 5967	2·904 3658 908 8476 913 3063 917 7418	27·89 28·04 28·18 28·33	0·392 7094 403 0806 413 4395 423 7860	2·890 4829 895 1488 899 7894 904 4049	26·79 26·94 27·08 27·23	45 43 47 8 5
5½ 5½ 5½ 5½	0°412 4142 422 2200 432 0142 441 7967	2·922 1544 926 5441 930 9112 935 2555	28·48 28·62 28·77 28·92	0·434 1202 444 4421 454 7518 465 0492	2·908 9955 913 5611 918 1020 922 6182	27·38 27·53 27·68 27·83	5\\\ 5\\\\ 5\\\\\ 5\\\\\\\\\\\\\\\\\\\
5 5 8 5 3 4 5 7 6 6	0.451 5677 461 3271 471 0750 480 8114	2·939 5774 943 8769 948 1541 952 4091	29·07 29·22 29·38 29·61	0.475 3344 485 6075 495 8685 506 1173	2·927 1100 931 5774 936 0205 940 4396	27·98 28·13 28·29 28·52	58 54 57 6
61 61 62 63 7	0·500 2498 519 6425 538 9898 558 2918	2·960 8531 969 2096 977 4798 985 6645	29·92 30·23 30·54 30·86	0·526 5788 546 9922 567 3577 587 6756	2·949 2058 957 8772 966 4547 974 9395	28·83 29·15 29·46 29·79	61 61 63 7
71 71 73 8	0·577 5487 596 7608 615 9283 635 0514	2·993 7645 1·001 7808 009 7144 017 5660	31·19 31·51 31·84 32·17	0.607 9460 628 1693 648 3456 668 4751	2·983 3323 991 6344 999 8468 1·007 9705	30·11 30·44 30·77 31·11	7½ 7½ 7¾ 8
81 81 83 83 9	0.654 1302 673 1650 692 1560 711 1035	ī·025 3366 033 0271 040 6384 048 1714	32·51 32·85 33·19 33·53	0.688 5581 708 5948 728 5853 748 5300	7.016 0064 023 9557 031 8194 039 5984	31·45 31·79 32·14 32·49	81 81 83 83 9
91 91 93 93 10	0.730 0075 748 8683 767 6860 786 4610	7:055 6270 063 0061 070 3095 077 5382	33·88 34·23 34·58	0·768 4289 788 2824 808 0906 827 8537	T·047 2938 054 9067 062 4379 069 8886	32·84 33·20 33·55	9½ 9½ 9¾ 10

21 Years				2	22 Year	rs	
100/	$\log (1+i)^{21}$	$\log \frac{1}{a_{21}}$	Factor	$\log (1+i)^{22}$	$\log \frac{1}{\tilde{a}_{22}}$	Factor	100 <i>i</i>
1 1 2	0·045 4873 090 7488	2·701 4094 724 5277	21.63	0.047 6534 095 0702	2·682 2697 706 4081	20·7I 21·0I	1 2
1½ 1¼ 1¾ 1½ 1½	0·102 0292 113 2957 124 5482 135 7869	2·730 2286 735 8982 741 5363 747 1437	22.05 22.17 22.29 22.42	0·106 8878 118 6907 130 4791 142 2529	2·712 3572 718 2723 724 1535 730 0010	21·13 21·25 21·38 21·50	1 1 1 1 3 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·147 0117 158 2228 169 4201 180 6036	2·752 7200 758 2656 763 7805 769 2648	22·54 22·67 22·79 22·92	0·154 0123 165 7572 177 4877 189 2038	2·735 8151 741 5957 747 3431 753 0573	21.62 21.75 21.88 22.00	15 13 17 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0 191 7735 202 9297 214 0722 225 2012	780 1423 785 5360 790 8994	23.05 23.18 23.31 23.44	0·200 9055 212 5930 224 2661 235 9250	758 7385 764 3869 770 0026 775 5857	22·13 22·26 22·39 22·52	2½ 2¼ 2¾ 2½ 2½
25 23 27 8 3	0·236 3166 247 4184 258 5068 269 5817	2·796 2330 801 5369 806 8112 812 0558	23·57 23·70 23·83 23·97	0.247 5697 259 2003 270 8167 282 4189	781 1365 786 6549 792 1413 797 5957	22.65 22.78 22.92 23.05	25 23 27 27 3
3½ 3½ 3½ 3½ 3½	0·280 6432 291 6913 302 7260 313 7473	2·817 2712 822 4573 827 6144 832 7426	24·10 24·24 24·38 24·51	0·294 0072 305 5813 317 1415 328 6877	2·803 0183 808 4092 813 7687 819 0967	23·19 23·32 23·46 23·60	3½ 3¼ 3¾ 3½ 3½
35 34 37 4	0·324 7554 335 7502 346 7318 357 7001	2·837 8418 842 9125 847 9547 852 9684	24.65 24.79 24.93 25.07	0·340 2200 351 7383 363 2428 374 7335	2·824 3936 829 6595 834 8944 840 0986	23.74 23.88 24.02 24.16	35 33 37 8 4
41 41 43 41 42	0·368 6553 379 5973 390 5263 401 4421	2·857 9538 862 9112 867 8406 872 7421	25·21 25·36 25·50 25·65	0·386 2103 397 6734 409 1227 420 5584	2·845 2723 850 4155 855 5285 860 6113	24·30 24·45 24·59 24·74	41 41 43 41 42
458 434 478 5	0.412 3449 423 2347 434 1114 444 9753	2·877 6160 882 4623 887 2813 892 0730	25·79 25 94 26·09 26·24	0.431 9804 443 3887 454 7834 466 1646	2·865 6643 870 6874 875 6810 880 6450	24·89 25·03 25·18 25·33	45 43 47 8 5
5½ 5¼ 5½ 5½	0·455 8262 466 6642 477 4893 488 3017	2·896 8375 901 5750 906 2857 910 9699	26·39 26·54 26·69 26·84	0.477 5322 488 8863 500 2269 511 5541	2·885 5798 890 4855 895 3621 900 2100	25·48 25·63 25·78 25·94	5 to
55 53 57 6	0 499 1012 509 8879 520 6619 531 4232	2·915 6274 920 2585 924 8634 929 4422	26·99 27·14 27·30 27·53	0·522 8679 534 1683 545 4553 556 7290	2·905 0291 909 8198 914 5822 919 3164	26 09 26·25 26·40 26·64	55 534 578 6
61 62 63 7	0·552 9077 574 3418 595 7256 617 0593	2·938 5219 947 4991 956 3747 965 1499	27.85 28.17 28.49 28.81	0·579 2367 601 6914 624 0934 646 4431	2·928 7011 937 9750 947 1396 956 1962	26.96 27.28 27.60 27.93	61 61 63 64 7
7½ 7½ 7¾ 8	0.638 3433 659 5778 680 7629 701 8989	2·973 8260 982 4041 990 8853 999 2709	29·14 29·48 29·81 30·15	0.668 7406 690 9862 713 1801 735 3226	2·965 1460 973 9904 982 7307 991 3682	28·27 28·60 28·94 29·29	7½ 7½ 7¾ 8
81 81 83 83 9	0·722 9860 744 0245 765 0146 785 9565	7.007 5619 015 7595 023 8650 031 8794	30·50 30·84 31·19 31·55	0.757 4139 779 4542 801 4438 823 3830	2·999 9042 1·008 3400 016 6770 024 9164	29.64 29.99 30.34 30.70	81 81 82 83 9
91 91 93 10	0·806 8504 827 6965 848 4951 869 2464	1 ·039 8039 047 6397 055 3878 063 0495	31·90 32·27 32·63	0·845 2718 867 1106 888 8996 910 6391	Ī·033 0596 041 1077 049 0622 056 9241	31.06 31.43 31.80	91 91 93 93 10

For explanation see pp. (60-80).

		Zears			24 Year	'S	
100 <i>i</i>	$\log (1+i)^{23}$	$\log \frac{1}{a_{23}}$	Factor	$\log \left(1+i\right)^{24}$	$\log \frac{1}{a_{24}}$	Factor	100 <i>i</i>
1 1 2	0.049 8194 099 3 916	2·664 0273 689 1831	19.88	0.051 9855	2·646 6057 672 7762	19.11	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·111 7463 124 0857 136 4099 148 7190	2·695 3794 701 5391 707 6622 713 7488	20·29 20·41 20·54 20·66	0·116 6048 129 4808 142 3408 155 1850	2.679 2190 685 6223 691 9858 698 3103	19·52 19·64 19·76 19·89	1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
$\begin{array}{ c c c }\hline 1_{58} \\ 1_{34} \\ 1_{78} \\ 2 \\ \end{array}$	0·161 0128 173 2916 185 5553 197 8040	725 8133 731 7916 737 7340	20·78 20·91 21·04 21·16	0·168 0134 180 8260 193 6229 206 4041	717 0494 723 2183	20·01 20·14 20·26 20·39	$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}$
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.210 0376 222 2563 234 4600 246 6489	743 6408 749 5119 755 3479 761 1485	21·29 21·42 21·55 21·68	0·219 1697 231 9196 244 6540 257 3728	735 4410 741 4952 747 5114	20·52 20·65 20·78 20·91	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$\begin{array}{ c c c }\hline 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \\ \end{array}$	0·258 8229 270 9821 283 1265 295 2562	7766 9142 772 6451 778 3413 784 0029	21.81 21.94 22.08 22.21	0·270 0761 282 7639 295 4364 308 0934	2·753 4899 759 43°9 765 3345 771 2009	21·04 21·17 21·31 21·44	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
31/4 31/4 33/8 31/2	0·307 3711 319 4714 331 5570 343 6280	795 2232 800 7824 806 3076	22·35 22·49 22·62 22·76	0·320 7351 333 3614 345 9725 358 5684	2·777 0303 782 8230 788 5790 794 2986	21·58 21·72 21·85 21·99	318 314 328 312
$\begin{array}{c} 3\frac{5}{8} \\ 3\frac{3}{4} \\ 3\frac{7}{8} \\ 4 \end{array}$	0·355 6845 367 7264 379 7538 391 7668	2·811 7991 817 2572 822 6819 828 0735	22·90 23·04 23·18 23·33	0·371 1490 383 7145 396 2649 408 8001	2·799 9820 805 6293 811 2408 816 8166	22·13 22·28 22·42 22·56	358 334 378 4
418 414 428 412	0·403 7653 415 7495 427 7192 439 6747	38 7580 844 0512 849 3118	23·47 23·62 23·76 23·91	0.421 3203 433 8255 446 3157 458 7910	2·822 3570 827 8622 833 3323 838 7674	22.71 22.85 23.00 23.15	41 43 42 42
45 43 47 8 5	0·451 6158 463 5427 475 4554 487 3539	2.854 5404 859 7367 864 9012 870 0340	24·06 24·20 24·35 24·50	0.471 2513 483 6968 496 1274 508 5432	2·844 1679 849 5341 854 8659 860 1637	23·29 23·44 23·59 23·75	45 434 478 5
51/4 3 /8 1/2 5 1/2	0·499 2382 511 1084 522 9645 534 8066	2.875 1351 880 2051 885 2437 890 2513	24.65 24.81 24.96 25.12	0·520 9442 533 33°5 545 7021 558 0590	2·865 4275 870 6578 875 8547 881 0182	23·90 24·05 24·21 24·36	5½ 5¼ 5½ 5½
558 534 578 6	0.546 6346 558 4486 570 2487 582 0349	2·895 2282 900 1744 905 0902 909 9756	25·27 25·43 25·59 25·82	0.570 4013 582 7290 595 0422 607 3408	2.886 1487 891 2464 896 3113 901 3439	24·52 24·68 24·84 25·08	55 53 57 6
614 611/2 6334 7	0.605 5656 629 0410 652 4613 675 8269	2·919 6564 929 2185 938 6631 947 9918	26·14 26·47 26·80 27·13	0.631 8945 656 3906 680 8292 705 2107	2·911 3126 921 1541 930 8699 940 4618	25·40 25·73 26·06 26·40	6½ 6½ 6¾ 7
$\begin{array}{c} 7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8 \end{array}$	0.699 1379 722 3947 745 5974 768 7464	2·957 2061 966 3073 975 2971 984 1769	27.47 27.81 28.15 28.50	0·729 5352 753 8031 778 0147 802 1701	2·949 9314 959 2803 968 5103 977 6228	26·74 27·09 27·43 27·79	7½ 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	0·791 8418 814 8840 837 8731 860 8095	2·992 9481 1·001 6123 010 1708 018 6251	28.85 29.21 29.57 29.93	0·826 2697 850 3137 874 3024 898 2359	2·986 6197 995 5025 1·004 2728 012 9322	28·14 28·51 28·87 29·24	8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9
9½ 9½ 9¾ 10	0·883 6932 906 5247 929 3042 952 0318	ī·026 9767 035 2271 043 3776 051 4297	30·30 30·67 31·05	0·922 114 7 945 9389 969 7087 993 4244	7.021 4826 029 9253 038 2620 046 4944	29.61 29.99 30.37	9½ 9½ 9¾ 10

	25 \	Tears			6 Year	'S	es of
1001	$\log (1+i)^{25}$	$\log \frac{1}{\tilde{a}_{25}}$	Factor	$\log (1+i)^{26}$	$\log \frac{1}{a_{26}}$	Factor	100 <i>i</i>
1 1 2	0.054 1515	2·629 9379 657 1204	18 39 18.69	0·056 3176 112 3557	2·613 9647 642 1565	17.74	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·121 4634 134 8758 148 2717 161 6511	2.663 8087 670 4543 677 0575 683 6184	18.81 18.93 19.05 19.18	0·126 3219 140 2708 154 2025 168 1171	2·649 0893 655 9764 662 8178 669 6141	18·15 18·27 18·39 18·52	1 1 1 1 3 1 1 1 1 2 1 1 2 1 2 1 2 1 2 1
$\begin{array}{ c c }\hline 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \\ \end{array}$	0·175 0140 188 3604 201 6905 215 0043	2.690 1373 696 6143 703 0495 709 4433	19·30 19·42 19·55 19·68	0·182 0145 195 8949 209 7582 223 6045	2.676 3651 683 0713 689 7327 696 3497	18.64 18.76 18.89 19.02	156 134 178 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·228 3017 241 5829 254 8479 268 0966	$ \begin{array}{r rrrr} \hline 2.715 & 7957 \\ 722 & 1071 \\ 728 & 3775 \\ 734 & 6072 \end{array} $	19.81 19.93 20.07 20.20	0·237 4338 251 2462 265 0418 278 8205	702 9224 709 4509 715 9357 722 3768	19·15 19·28 19·41 19·54	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25 23 27 27 3	0·281 3293 294 5458 307 7462 320 9306	746 7964 746 9452 753 0539 759 1227	20·33 20·46 20·60 20·73	0·292 5824 306 3276 320 0561 333 7678	735 1289 741 4405 747 7092	19.67 19.80 19.94 20.08	25 23 27 27 3
3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}	0·334 0990 347 2515 360 3881 373 5087	771 1414 777 0916 783 0029	20·87 21·01 21·15 21·29	0·347 4630 361 1416 374 8036 388 4491	753 9354 760 1194 766 2612 772 3613	20·21 20·35 20·49 20·63	3½ 3½ 3½ 3½ 3½ 3½
358 334 378 4	0·386 6136 399 7026 412 7759 425 8335	794 7089 800 5041 806 2612	21·43 21·57 21·71 21·86	0·402 0781 415 6907 429 2870 442 8668	2·778 4197 784 4369 790 4129 796 3480	20·77 20·92 21·06 21·21	35 33 37 37 4
41 41 48 41 48 41	0.438 8754 451 9016 464 9122 477 9073	2·811 9801 817 6613 823 3050 828 9113	22·00 22·15 22·30 22·44	0·456 4304 469 9777 483 5087 497 0236	2·802 2425 808 0965 813 9105 819 6846	21·35 21·50 21·65 21·80	41 41 43 41 41 41
458 434 478 5	0·490 8868 503 8508 516 7993 529 7325	2·834 4805 840 0127 845 5083 850 9674	22·59 22·75 22·90 23·05	0·510 5222 524 0048 537 4713 550 9218	2·825 4188 831 1139 836 7696 842 3866	21.95 22.10 22.25 22.41	458 434 478 5
51/4 51/4 51/2 51/2	0·542 6502 555 5526 568 4397 581 3115	2·856 3903 861 7773 867 1284 872 4438	23·20 23·36 23·52 23·67	0·564 3562 577 7747 591 1773 604 5639	2·847 9648 853 5045 859 0062 864 4699	22·56 22·72 22·88 23·04	51 51 52 52
558 534 578 6	0·594 1680 607 0094 619 8356 632 6466	2·877 7241 882 9693 888 1795 893 3551	23.83 23.99 24.15 24.39	0.617 9348 631 2898 644 6290 657 9525	2·869 8961 875 2847 880 6362 885 9509	23·20 23·36 23·52 23·77	55 53 57 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	0.658 2235 683 7402 709 1971 734 5944	2 903 6033 913 7158 923 6942 933 5406	24·72 25·05 25·39 25·73	0.684 5524 711 0898 737 5650 763 9782	2·896 4705 906 8456 917 0781	24·10 24·43 24·77 25·12	61 61 63 63 7
7½ 7½ 7¾ 8	0.759 9325 785 2116 810 4320 835 5939	2·943 2565 952 8441 962 3051 971 6412	26·08 26·42 26·78 27·13	0·790 3298 816 6201 842 8492 869 0176	2·937 1240 946 9414 956 6244 966 1752	25·46 25·82 26·18 26·54	7½ 7½ 7¾ 8
8½ 8½ 8¾ 9	0.860 6976 885 7435 910 7316 935 6624	2·980 8544 989 9465 998 9192 1·007 7744	27·50 27·86 28·23 28·61	0·895 1255 921 1732 947 1609 973 0889	2·975 5957 984 8879 994 0539 1·003 0957	26·90 27·27 27·65 28·03	8½ 8½ 8¾ 9
9 ¹ / ₂ 9 ¹ / ₂ 9 ³ / ₄ 10	0.960 5361 985 3530 1.010 1132 034 8171	7.016 5139 025 1394 033 6528 042 0557	28·98 29·37 29·75	0·998 9576 1·024 7671 050 5178 076 2098	T·012 0152 020 8144 029 4953 038 0597	28·41 28·80 29·19	91 91 92 93 10

	27 7	Tears	ANNOI		28 Year	's	
100%	$\log \left(1+\boldsymbol{i}\right)^{27}$	$\log \frac{1}{a_{27}}$	Factor	log (1+i) ²⁸	$\log \frac{1}{a_{28}}$	Factor	100 <i>i</i>
1	0·058 4837 116 6771	2·598 6334 627 8320	17.12	0.060 6497 120 9985	2·583 8975 614 1000	16·50 16·85	1 2
1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1	0·131 1804 145 6659 160 1334 174 5831	2.635 0082 642 1357 649 2144 656 2446	17.54 17.66 17.78 17.90	0·136 0390 151 0609 166 0643 181 0492	2·621 5189 628 8856 636 2004 643 4633	16·97 17·09 17·21 17·33	$\begin{array}{c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·189 0151 203 4293 217 8258 232 2046	2.663 2265 670 1603 677 0465 683 8850	18·03 18·15 18·28 18·41	0·196 0156 210 9637 225 8934 240 8048	2.650 6747 657 8349 664 9441 672 0024	17·46 17·58 17·71 17·84	158 134 178 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·246 5659 260 9096 275 2357 289 5444	2.690 6761 697 4201 704 1173 710 7677	18·53 18 66 18·80 18·93	0·255 6979 270 5729 285 4296 300 2682	2.679 0102 685 9679 692 8754 699 7331	17·97 18·10 18·23 18·36	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$\begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	0·303 8356 318 1094 332 3659 346 6051	$ \begin{array}{r} \hline{2.717} & 3717 \\ 723 & 9296 \\ 730 & 4416 \\ 736 & 9079 \end{array} $	19.06 19.20 19.33 19.47	0·315 0888 329 8913 344 6757 359 4423	713 3005 720 0106 726 6720	18·49 18·63 18·76 18·90	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3 ¹ / ₈ 3 ¹ / ₄ 3 ³ / ₈ 3 ¹ / ₂	0·360 8270 375 0316 389 2191 403 3894	743 3287 749 7045 756 0353 762 3215	19.61 19.74 19.88 20.03	0·374 1909 388 9217 403 6346 418 3298	733 2851 739 8500 746 3672 752 8367	19·04 19·18 19·32 19·46	3 1 4 3 8 1 1 2 3 8 1 3 3 8 1 3 3 3 8 1 3 3 3 3
3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4	0·417 5427 431 6788 445 7980 459 9002	2·768 5632 774 7609 780 9147 787 0248	20·17 20·31 20·46 20·60	0.433 0072 447 6670 462 3090 476 9335	765 6343 771 9629 778 2452	19.61 19.75 19.90 20.04	35 34 37 8 4
4½ 4½ 4½ 4½	0.473 9854 488 0537 502 1052 516 1398	2·793 0917 799 1155 805 0964 811 0349	20·75 20·90 21·05 21·20	0·491 5404 506 1298 520 7017 535 2561	790 6716 790 8164 802 9160	20·19 20·34 20·49 20·65	41 41 43 41 42
458 434 478 5	0·530 1577 544 1589 558 1433 572 1111	2·816 9311 822 7854 828 5978 834 3689	21·35 21·51 21·66 21·82	0·549 7932 564 3129 578 8153 593 3004	2.808 9707 814 9808 820 9466 826 8683	20·80 20·95 21·11 21·27	458 434 478 5
5½ 5¼ 5½ 5½	0·586 0622 599 9968 613 9149 627 8164	2·840 0988 845 7880 851 4364 857 0446	21·97 22·13 22·29 22·45	0.607 7682 622 2189 636 6525 651 0689	2·832 7464 838 5811 844 3727 850 1216	21·42 21·58 21·74 21·91	5\frac{1}{8} 5\frac{1}{4} 5\frac{1}{8} 5\frac{1}{2}
558 533 578 6	0.641 7015 655 5702 669 4224 683 2584	2·862 6126 868 1410 873 6299 879 0797	22.61 22.77 22.94 23.19	0.665 4682 679 8505 694 2159 708 5642	2·855 8280 861 4922 867 1146 872 6955	22·07 22·23 22·40 22·65	558 533 578 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	0·710 8813 738 4394 765 9329 793 3620	2·889 8625 900 4921 910 9705 921 3000	23·52 23·86 24·20 24·55	0·737 2103 765 7890 794 3007 822 7458	2·883 7338 894 6099 905 3259 915 8847	22·99 23·33 23·68 24·03	$\begin{array}{c} 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7 \end{array}$
$\begin{array}{c c} 7_{\frac{1}{4}} \\ 7_{\frac{1}{2}} \\ 7_{\frac{3}{4}} \\ 8 \end{array}$	0·820 7271 848 0285 875 2665 902 4414	2·931 4830 941 5215 951 4181 961 1747	24·90 25·26 25·62 25·99	0·851 1244 879 4370 907 6838 935 8652	2·926 2885 936 5399 946 6413 956 5953	24·39 24·75 25·12 25·49	$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8
814 813 834 9	0·929 5534 956 6029 983 5902 1·010 5154	2·970 7937 980 2773 989 6277 998 8472	26·36 26·74 27·12 27·50	0.963 9813 992 0327 1.020 0194 047 9419	2·966 4043 976 0708 985 5971 994 9857	25·86 26·24 26·63 27·02	81 81 83 83 9
91 91 93 93 10	1.037 3790 064 1812 090 9223 117 6025	7·007 9378 016 9019 025 7414 034 4586	27·89 28·28 28·68	1.075 8005 103 5953 131 3268 158 9952	1.004 2389 013 3593 022 3490 031 2105	27.41 27.81 28.21	9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10

29 Years					O Year	's	~
		log 1	Foots	$\log (1+i)^{30}$	100° 1	1 1	7001
100 <i>i</i>	$\log (1+i)^{29}$	10g <u>a</u> ₂₉	Factor	10g (1+1)	- 10g - - 30	Factor	1001
1 1 2	0.062 8158 125 3198	2·569 7149 600 9187	16·02 16·32	0.064 9819 129 6412	2·556 0481 588 2506	15.53	12
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·140 8975 156 4559 171 9951 187 5152	2.608 5793 616 1843 623 7339 631 2284	16·44 16·56 16·68 16·80	0·145 7560 161 8510 177 9260 193 9813	2·596 1520 603 9942 611 7775 619 5022	15.94 16.06 16.18 16.30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
$\begin{array}{c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·203 0162 218 4981 233 9610 249 4050	2.638 6680 646 0530 653 3836 660 6602	16.93 17.05 17.18 17.31	0·210 0168 226 0325 242 0287 258 0052	2.627 1686 634 7770 642 3276 649 8207	16·43 16·55 16·68 16·81	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{1}{8}$ $2\frac{1}{2}$	0.264 8300 280 2362 295 6235 310 9921	2.667 8830 675 0522 682 1682 689 2313	17·44 17·57 17·70 17·83	0·273 9621 289 8995 305 8174 321 7160	2.657 2567 664 6357 671 9584 679 2247	16·94 17·07 17·20 17·34	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25 23 27 8 3	0·326 3419 341 6731 356 9856 372 2795	703 1998 710 1058 716 9600	17·96 18·10 18·24 18·38	0·337 5951 353 4549 369 2954 385 1167	2.686 4352 693 5900 700 6895 707 7341	17·47 17·61 17·74 17·88	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3½ 3½ 3½ 3½	0·387 5549 402 8117 418 0502 433 2701	730 5144 737 2151 743 8654	18·51 18·65 18·80 18·94	0·400 9188 416 7018 432 4657 448 2105	2·714 7242 721 6599 728 5417 735 3699	18·02 18·16 18·31 18·45	3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
358 334 371 4	0.448 4718 463 6551 478 8201 493 9668	2·750 4655 757 0155 763 5160 769 9673	19.08 19.23 19.38 19.52	0·463 9363 479 6432 495 3311 511 0002	742 1450 748 8670 755 5366 762 1540	18.60 18.74 18.89 19.04	3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4
41 41 43 41 42	0·509 0954 524 2058 539 2982 554 3724	2·776 3697 782 7234 789 0288 795 2863	19.67 19.82 19.98 20.13	0·526 6504 542 2819 557 8947 573 4887	2·768 7195 775 2336 781 6964 788 1085	19·19 19·34 19·49 19·65	41/4 41/4 41/2 41/2
45 43 47 8 5	0·569 4287 584 4669 599 4872 614 4897	2·801 4962 807 6587 813 7744 819 8433	20·28 20·44 20·60 20·75	0.589 0641 604 6209 620 1592 635 6790	2·794 4703 800 7820 807 0441 813 2570	19.80 19.96 20.12 20.28	458 434 478 5
5 ¹ / ₈ 5 ¹ / ₄ 5 ³ / ₈ 5 ¹ / ₂	0.629 4743 644 4410 659 3900 674 3213	2·825 8660 831 8428 837 7740 843 6598	20·91 21·07 21·24 21·40	0.651 1803 666 6631 682 1276 697 5738	2·819 4208 825 5361 831 6032 837 6225	20·44 20·60 20·77 20·93	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
558 578 6	0.689 2349 704 1309 719 0093 733 8701	2 849 5008 855 2971 861 0493 866 7575	21·57 21·73 21·90 22·15	0·713 0017 728 4113 743 8027 759 1760	2·843 5943 849 5192 855 3973 861 2291	21·10 21·27 21·43 21·69	5\\\ 5\\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\
6½ 6½ 6¾ 7	0·763 5392 793 1386 822 6686 852 1296	2·878 0436 889 1582 900 1040 910 8839	22·49 22·84 23·19 23·55	0·789 8682 820 4882 851 0365 881 5133	2·8 72 7553 884 1009 895 2687 906 2618	22·03 22·39 22·74 23·10	$6\frac{1}{4}$ $6\frac{1}{2}$ $6\frac{3}{4}$ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	0.881 5217 910 8455 940 1011 969 2889	2·921 5005 931 9565 942 2547 952 3979	23.91 24.28 24.65 25.02	0.911 9190 942 2539 972 5184 1.002 7127	2·917 0832 927 7359 938 2229 948 5471	23.47 23.84 24.21 24.60	7½ 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	0·998 4092 I·027 4624 056 4487 085 3684	2·962 3886 972 2295 981 9234 991 4730	25·40 25·79 26·18 26·57	1.032 8372 062 8921 092 8780 122 7949	2·958 7115 968 7191 978 5726 988 2751	24·98 25·37 25·77 26·17	81 81 82 83 84 9
91 91 92 93 10	1·114 2219 143 0095 171 7313 200 3879	T·000 8806 010 1491 019 2809 028 2787	26·97 27·38 27·78	1·152 6434 182 4236 2 12 1359 241 7806	2·997 8292 1·007 2380 016 5042 025 6304	26·57 26·98 27·39	9½ 9½ 9¾ 10

	31 7	Zears	AININU		32 Year	'S	
100 <i>i</i>	$\log \left(1+I\right)^{31}$	log 1	Factor	$\log (1 + \mathbf{i})^{32}$	log 1 - - a ₃₂	Factor	100 <i>i</i>
1 1 2	0.067 1479 133 9626	2·542 8633 576 0617	15.06	0.069 3140 138 2840	2·530 1296 564 3214	14.62	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·150 6146 167 2460 183 8569 200 4473	2·584 2029 592 2814 600 2973 608 2510	15·47 15·59 15·72 15·84	0·155 4731 172 6410 189 7878 206 9134	2·572 7015 581 0152 589 2625 597 4440	15.04 15.16 15.28 15.40	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
158 134 178 2	0·217 0173 233 5670 250 0963 266 6053	2.616 1429 623 9731 631 7421 639 4501	15.96 16.09 16.22 16.35	0·224 0179 241 1014 258 1639 275 2055	\$\overline{2}\$ 605 5599 613 6106 621 5965 629 5177	15·53 15·65 15·78 15·91	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.283 0942 299 5628 316 0114 332 4398	2.647 0975 654 6847 662 2119 669 6794	16·48 16·61 16·74 16·87	0·292 2262 309 2261 326 2053 343 1637	2.637 3748 645 1682 652 8981 660 5649	16·04 16·17 16·30 16·44	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$\begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	0·348 8483 365 2367 381 6053 397 9540	2·677 0878 684 4372 691 7280 698 9607	17.01 17.14 17.28 17.42	0·360 1014 377 0186 393 9151 410 7912	2.668 1690 675 7108 683 1907 690 6091	16·57 16·71 16·85 16·99	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3 ¹ / ₈ 3 ¹ / ₄ 3 ³ / ₈ 3 ¹ / ₂	0.414 2828 430 5919 446 8812 463 1508	2·706 1355 713 2529 720 3132 727 3167	17·56 17·70 17·85 17·99	0·427 6468 444 4819 461 2967 478 0912	2.697 9663 705 2628 712 4989 719 6752	17·13 17·27 17·42 17·56	3½ 3¼ 3½ 3½ 3½
35 33 37 4 4	0.479 4009 495 6313 511 8421 528 0335	2·734 2639 741 1552 747 9908 754 7714	18·14 18·29 18·43 18·59	0·494 8654 511 6194 528 3532 545 0669	733 8495 740 8485 747 7892	17·71 17·86 18·01 18·16	3 ⁵ / ₈ 3 ³ / ₈ 3 ⁷ / ₈ 4
4½ 4¼ 4¾ 4½	0·544 2054 560 3580 576 4911 592 6050	2·761 4970 768 1683 774 7856 781 3492	18·74 18·89 19·04 19·20	0·561 7605 578 4340 595 0876 611 7213	2·754 6720 761 4975 768 2660 774 9781	18·31 18·47 18·62 18·78	4½ 4¼ 4½ 4½ 4½
45 43 47 8 5	0.608 6996 624 7750 640 8312 656 8683	2·787 8596 794 3172 800 7224 807 0756	19·36 19·52 19·68 19·84	0.628 3351 644 9290 661 5032 678 0576	781 6338 788 2340 794 7791 801 2694	18·94 19·10 19·26 19·42	4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5
5½ 5½ 5½ 5½ 5½	0 672 8863 688 8852 704 8652 720 8262	2·813 3771 819 6275 825 8271 831 9762	20·00 20·16 20·33 20·49	0·694 5923 711 1073 727 6028 744 0787	2·807 7053 814 0872 820 4158 826 6914	19·59 19·75 19·92 20·09	5 1 4 5 3 8 5 1 2
5\frac{5}{8} 5\frac{3}{4} 5\frac{7}{8} 6	0.736 7684 752 6917 768 5961 784 4818	2·838 0755 844 1252 850 1257 856 0774	20.66 20.83 21.00 21.26	0·760 5351 776 9720 793 3895 809 7877	2·832 9144 839 0853 845 2046 851 2726	20·26 20·43 20·60 20·86	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6
6½ 6½ 6¾ 7	0·816 1971 847 8378 879 4044 910 8971	2·867 8363 879 4052 890 7874 901 9861	21.61 21.96 22.32 22.69	0·842 5260 875 1874 907 7723 940 2809	2·863 2570 875 0419 886 6309 898 0278	21·21 21·57 21·94 22·31	$6\frac{1}{4}$ $6\frac{1}{2}$ $6\frac{3}{4}$ 7
7 ¹ / ₂ 7 ¹ / ₂ 7 ³ / ₄ 8	0·942 3163 973 6624 1·004 9356 036 1364	2·913 0046 923 8462 934 5143 945 0118	23·06 23·43 23·82 24·20	0.972 7136 1.005 0709 037 3529 069 5602	2·909 2359 920 2589 931 1004 941 7638	22.68 23.06 23.44 23.83	$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8
81 81 82 83 9	1.067 2651 098 3219 129 3072 160 2214	2·955 3422 965 5086 975 5140 985 3618	24·59 24·99 25·39 25·79	1·101 6930 133 7516 165 7365 197 6479	2·952 2527 962 5704 972 7204 982 7062	24·23 24·63 25·04 25·45	81 81 83 83 9
91 91 92 93 10	1·191 0648 221 8377 252 5404 283 1732	2·995 0549 1·004 5964 013 9894 023 2369	26·20 26·62 27·03	1·229 4863 261 2518 292 9449 324 5659	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	25·86 26·28 26·70	9½ 9½ 9¾ 10

		33 7	Years			34 Year	'S	LS OF
	100/	$\log (1 + \mathbf{i})^{33}$	$\log \frac{1}{\tilde{a}_{33}}$	Factor	log (1+1)34	$\log \frac{1}{\hat{a}_{34}}$	Factor	100/
	1 2	0°071 4800 142 6053	2·517 8195 553 0019	14.21	0°073 6461 146 9267	2·505 9074 542 0778	13.82	1 2
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·160 3316 178 0361 195 7186 213 3794	2·561 6199 570 1677 578 6453 587 0533	14.62 14.74 14.87 14.99	0°165 1902 183 4311 201 6495 219 8454	2·550 9329 559 7136 568 4204 577 0537	14·24 14·36 14·48 14·60	1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2	0*231 0184 248 6358 266 2315 283 8057	2·595 3920 603 6617 611 8628 619 9958	15·12 15·24 15·37 15·50	0°238 0190 256 1702 274 2991 292 4058	2·585 6138 594 1010 602 5160 610 8589	14.73 14.85 14.98 15.11	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
-	2½ 2¼ 2¾ 2½ 2½	0°301 3583 318 8895 336 3992 353 8876	2.628 0609 636 0586 643 9893 651 8533	15.63 15.76 15.90 16.03	0°310 4904 328 5528 346 5931 364 6114	2.619 1302 627 3305 635 4600 643 5193	15·24 15·38 15·51 15·65	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
	25 23 27 8 3	0·371 3546 388 8004 406 2250 423 6284	2.659 6511 667 3832 675 0498 682 6515	16·17 16·30 16·44 16·58	0·382 6078 400 5822 418 5348 436 4656	2.651 5088 659 4289 667 2800 675 0627	15.78 15.92 16.06 16.20	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
	31/4 31/4 31/8 31/2	0.441 0107 458 3720 475 7122 493 0315	2.690 1887 697 6618 705 0713 712 4175	16.73 16.87 17.02 17.16	0°454 3747 472 2621 490 1278 507 9719	2.682 7775 690 4248 698 0050 705 5187	16·35 16·49 16·64 16·78	3 ¹ / ₈ 3 ¹ / ₄ 3 ³ / ₈ 3 ¹ / ₂
And desired the second	358 334 378 4	0.510 3299 527 6075 544 8642 562 1002	2·719 7010 726 9223 734 0817 741 1797	17·31 17·46 17·61 17·76	0°525 7945 543 5956 561 3753 579 1335	2·712 9662 720 3485 727 6654 734 9180	16.93 17.08 17.24 17.39	35 334 37 4
	41/4 43/8 41/2	0.579 3155 596 5101 613 6841 630 8376	755 1936 762 1102 763 9674	17.92 18.07 18.23 18.39	0·596 8705 614 5862 632 2806 649 9539	749 2313 756 2931 763 2926	17.54 17.70 17.86 18.02	4½ 4½ 4½ 4½ 4½
	45 43 47 5	0.647 9705 665 0830 682 1751 699 2469	782 5053 789 1868 795 8108	18·55 18·71 18·87 19·03	0.667 6060 685 2371 702 8471 720 4362	2·770 2299 777 1058 783 9207 790 6752	18·18 18·34 18·51 18·67	45 43 47 8 5
	5 to	0.716 2983 733 3294 750 3404 767 3312	2.802 3778 808 8880 815 3422 821 7407	19·20 19·37 19·54 19·71	0.738 0043 755 5516 773 0780 790 5836	2·797 3698 804 0051 810 5815 817 0996	18·84 19·01 19·18	5½ 5½ 5½ 5½ 5½
	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	0.784 3018 801 2524 818 1830 835 0936	2.828 0840 834 3728 840 6073 846 7881	19.88 20.05 20.22 20.49	0.808 0685 825 5328 842 9764 860 3994	2·823 5600 829 9630 836 3093 842 5995	19.52 19.70 19.87 20.14	55 534 578 6
	61/4 61/2 63/4 7	0.868 8550 902 5371 936 1402 969 6647	2.858 9907 870 9844 882 7731 894 3608	20·84 21·21 21·57 21·95	0·895 1839 929 8867 964 5080 999 0484	2·855 0133 867 2087 879 1900	20·50 20·87 21·24 21·62	$6\frac{1}{4}$ $6\frac{1}{2}$ $6\frac{3}{4}$ 7
	7½ 7½ 7¾ 8	036 4793 069 7702 102 9839	2.905 7512 916 9484 927 9560 938 7780	22·33 22·71 23·10 23·50	1.033 5082 067 8878 102 1875 136 4077	2·902 5270 913 8912 925 0580 936 0314	22·00 22·39 22·78 23·18	7½ 7½ 7¾ 8
	8½ 8½ 8¾ 9	1·136 1209 169 1814 202 1658 235 0744	2·949 4181 959 8800 970 1674 980 2840	23·90 24·30 24·71 25·13	1·170 5488 204 6111 238 5950 272 5009	2·946 8158 957 4149 967 8329 978 0736	23·59 24·00 24·41 24·83	814 812 834 9
	9½ 9½ 9¾ 10	1·267 9077 300 6659 333 3495 365 9586	2·990 2334 1·000 0192 009 6448 019 1138	25·55 25·97 26·40	1·306 3292 340 0801 373 7540 407 3513	2.988 1410 998 0389 1.007 7709 017 3410	25·26 25·69 26·12	9½ 9½ 9¾ 10

	35 7	Tears	İ	3	36 Year	'S	
100 <i>i</i>	$\log \left(1+\boldsymbol{I}\right)^{35}$	log 1/a ₃₅	Factor	$\log (1+i)^{36}$	log 1	Factor	100 <i>i</i>
1 1 2	0.075 8122	2·494 3703 531 5259	13.46	0·077 9782 155 5695	2·483 1869 521 3252	13.11	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·170 0487 188 8261 207 5804 226 3115	2·540 6171 549 6299 558 5647 567 4220	13·87 13·99 14·11 14·24	0·174 9072 194 2211 213 5112 232 7775	2·530 6515 539 8953 549 0570 558 1371	13·52 13·64 13·77 13·89	1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·245 0196 263 7046 282 3668 301 0060	584 9054 593 5327 602 0840	14·36 14·49 14·62 14·75	0.252 0201 271 2390 290 4344 309 6062	2·567 1359 576 0541 584 8919 593 6499	14·02 14·14 14·27 14·40	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·319 6224 338 2161 356 7870 375 3353	2.610 5600 618 9608 627 2874 635 5399	14.88 15.01 15.15 15.28	0·328 7545 347 8794 366 9809 386 0592	2.602 3286 610 9285 619 4500 627 8939	14·54 14·67 14·80 14·94	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
2 ^{5/8} 2 ^{3/4} 2 ^{7/8} 3	0·393 8610 412 3641 430 8447 449 3029	2.643 7189 651 8248 659 8583 667 8198	15·42 15·56 15·70 15·84	0.405 1141 424 1459 443 1545 462 1401	2.636 2603 644 5500 652 7636 660 9015	15.08 15.22 15.36 15.50	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3 1 3 3 3 3 3 3 3 2 3 2 3 3 3 3 3 3 3 3	0.467 7387 486 1521 504 5433 522 9122	2.675 7097 683 5286 691 2771 698 9557	15·99 16·13 16·28 16·43	0.481 1026 500 0422 518 9588 537 8526	2.668 9642 676 9524 684 8666 692 7074	15.65 15.79 15.94 16.09	31 31 38 31 31 32
358 334 378 4	0·541 2590 559 5837 577 8863 596 1669	2·706 5648 714 1050 721 5769 728 9810	16·58 16·73 16·88 17·04	0·556 7236 575 5718 594 3973 613 2002	2·700 4754 708 1710 715 7950 723 3480	16·24 16·40 16·55 16·71	358 334 378 4
41 41 43 41 42	0.614 4255 632 6622 650 8771 669 0702	2·736 3176 743 5880 750 7921 757 9306	17·19 17·35 17·51 17·67	0.631 9805 650 7383 669 4736 688 1865	2·730 8304 738 2430 745 5862 752 8608	16.86 17.02 17.18 17.35	41 41 43 41 42
458 434 478 5	0.687 2415 705 3911 723 5191 741 6255	2·765 0040 772 0131 778 9582 785 8401	17.83 18.00 18.16 18.33	0·706 8770 725 5451 744 1911 762 8148	2·760 0673 767 2063 774 2786 781 2846	17.51 17.67 17.84 18.01	45 43 47 8 5
51/4 51/4 51/2 51/2	0·759 7103 777 7737 795 8156 813 8361	2·792 6592 799 4161 806 1114 812 7458	18·50 18·67 18·84 19·01	0·781 4163 799 9958 818 5532 837 0885	795 1005 801 9115 808 6588	18·18 18·35 18·53 18·70	$ 5\frac{1}{8} $ $ 5\frac{1}{4} $ $ 5\frac{3}{8} $ $ 5\frac{1}{2} $
55 53 57 6	0.831 8353 849 8132 867 7698 885 7053	2·819 3197 825 8338 832 2885 838 6845	19·19 19·37 19·54 19·81	0·855 6020 874 0935 892 5632 911 0112	2.815 3431 821 9648 828 5247 835 0233	18.88 19.06 19.23 19.51	55 534 578 6
61 61 63 63 7	0·921 5129 957 2363 992 8759 1·028 4322	2·8 51 3029 86 3 6931 87 5 8601 88 7 8 083	20·18 20·55 20·92 21·31	0.947 8418 984 5859 1.021 2438 057 8160	2·847 8392 860 4178 872 7638 884 8821	19.88 20.25 20.63 21.02	61 61 63 63 7
71/4 71/2 73/4 8	1.063 9055 099 2963 134 6048 169 8314	2·899 5423 911 0665 922 3856 933 5038	21.69 22.09 22.49 22.89	1.094 3028 130 7047 167 0220 203 2552	2·896 7776 908 4553 919 9200 931 1765	21.41 21.81 22.21 22.62	$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8
8½ 8½ 8¾ 9	1·204 9767 240 0408 275 0243 309 9274	2·944 4256 955 1554 965 6973 976 0557	23·30 23·71 24·14 24·56	1·239 4046 275 4706 311 4536 347 3539	2 942 2293 953 0831 963 7427 974 2125	23·03 23·45 23·88 24·31	81 81 83 83 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	1·344 7506 379 4942 414 1585 448 7440	2·986 2346 996 2382 1·006 0706 015 7356	24 99 25 43 25 87	1·383 1720 418 9083 454 5630 490 1367	2·984 4968 994 6003 1·004 5270 014 2813	24.74 25.18 25.63	91 91 93 93 10

	37 \	Tears		38 Years			
100 <i>i</i>	$\log (1+i)^{37}$	$\log \frac{1}{a_{37}}$	Factor	$\log (1+i)^{38}$	$\log \frac{1}{a_{38}}$	Factor	100 <i>i</i>
1 2	0.080 1443	2·472 3378 511 4562	12.78	0.082 3103 164 2122	2·461 8052 501 9010	12.47	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·179 7658 199 6162 219 4421 239 2436	2·521 0167 530 4906 539 8779 549 1795	13·19 13·32 13·44 13·56	0·184 6243 205 0112 225 3730 245 7096	2·511 6948 521 3974 531 0094 540 5314	12.88 13.00 13.13 13.25	$ \begin{array}{r} 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{8}} \\ 1_{\frac{1}{2}} \end{array} $
158 134 178 2	0°259 0207 278 7735 298 5020 318 2064	2·558 3957 567 5271 576 5741 585 5372	13.69 13.82 13.95 14.08	0.266 0212 286 3079 306 5696 326 8065	2·549 9637 559 3068 568 5614 577 7280	13·38 13·51 13·64 13·77	158 134 178 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·337 8866 357 5427 377 1748 396 7830	2·594 4170 603 2140 611 9287 620 5618	14·21 14·34 14·48 14·62	0°347 0186 367 2060 387 3688 407 5069	2·586 8073 595 7996 604 7055 613 5259	13.90 14.04 14.17 14.31	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$egin{array}{c} 2rac{5}{8} \ 2rac{3}{4} \ 2rac{7}{8} \ 3 \ \end{array}$	0°416 3673 435 9277 455 4644 474 9773	2.629 1138 637 5851 645 9766 654 2885	14.76 14.90 15.04 15.18	0.427 6205 447 7096 467 7742 487 8145	2.622 2613 630 9121 639 4792 647 9630	14.45 14.59 14.73 14.88	25 23 27 8 3
3 ½ 3 ½ 3 ½ 3 ½	0.494 4666 513 9322 533 3743 552 7929	2.662 5216 670 6767 678 7541 686 7546	15·33 15·48 15·62 15·77	0.507 8305 527 8223 547 7899 567 7333	2.656 3644 664 6837 672 9219 681 0796	15.03 15.17 15.32 15.47	3½ 3½ 3½ 3½
35 33 37 37 4	0.572 1881 591 5599 610 9084 630 2336	2·694 6789 702 5272 710 3006 717 9995	15.93 16.08 16.24 16.39	0.587 6527 607 5480 627 4194 647 2669	2.689 1574 697 1 560 705 0760 712 9183	15.63 15.78 15.94 16.10	3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4
41 41 42 41 42	0.649 5355 668 8144 688 0701 707 3027	733 1768 740 6564 748 0641	16·55 16·71 16·87 17·04	0.667 0905 686 8904 706 6666 726 4190	720 6834 728 3721 735 9850 743 5230	16·26 16·42 16·58 16·75	41/4 3/8 41/2 42/2
45 43 47 5	0.726 5124 745 6992 764 8630 784 0041	762 6667 769 8630 776 9901	17·20 17·37 17·54 17·71	0.746 1479 765 8532 785 5350 805 1934	2·750 9867 758 3768 765 6940 772 9392	16·91 17·08 17·25 17·43	458 434 478 5
5½ 5½ 5½ 5½	0.803 1223 822 2179 841 2907 860 3410	791 0394 797 9630 804 8202	17.88 18.05 18.23 18.41	0.824 8283 844 4400 864 0283 883 5935	780 1128 787 2158 794 2489 801 2127	17.60 17.77 17.95 18.13	5½ 5¼ 5¾ 5½ 5½
5\frac{5}{8}\$ 5\frac{3}{4}\$ 5\frac{7}{8}\$ 6	0·879 3687 898 3739 917 3567 936 3170	2.811 6115 818 3377 824 9995 831 5974	18·58 18·76 18·95 19·22	0°903 1354 922 6543 942 1501 961 6229	2·808 1080 814 9354 821 6959 828 3900	18·31 18·49 18·67 18·95	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	0.974 1707 1.011 9355 049 6117 087 1998	2·844 6046 857 3647 869 8830 882 1649	19·59 19·97 20·36 20·75	1.000 4997 039 2851 077 9796 116 5836	2.841 5820 854 5174 867 2017 879 6409	19·33 19·71 20·10 20·49	6½ 6½ 6¾ 7
7½ 7½ 7½ 7¾ 8	1.124 7001 162 1132 199 4393 236 6790	2·894 2156 906 0404 917 6443 929 0325	21·14 21·54 21·95 22·37	1.155 0974 193 5216 231 8566 270 1027	2·891 8404 903 8058 915 5428 927 0568	20·89 21·30 21·71 22·13	7½ 7½ 7¾ 8
814 815 834 9	1.273 8325 310 9003 347 8828 384 7804	2·940 2101 951 1820 961 9531 972 5283	22·79 23·21 23·64 24·08	1·308 2604 346 3301 384 3121 422 2069	2·938 3531 949 4371 960 3141 970 9890	22·56 22·98 23·42 23·86	81 81 83 83 9
94 91 93 93 10	1°421 5935 458 3224 494 9676 531 5294	2·982 9123 993 1098 1·003 1254 012 9635	24.52 24.96 25.41	1.460 0149 497 7365 535 3721 572 9220	2.981 4670 991 7532 7.001 8522 011 7688	24·30 24·75 25·21	9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10

	39 7	Tears		4	O Year	's	
100 <i>i</i>	$\log \left(1+\boldsymbol{i}\right)^{39}$	$\log \frac{1}{a_{39}}$	Factor	$\log \left(1+\boldsymbol{i}\right)^{40}$	$\log \frac{1}{a}$	Factor	100 <i>i</i>
1 1 2	0·084 4764 168 5336	2·451 5726 492 6430	12.17	0.086 6425 172 8550	2·441 6247 483 6672	11.89	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·189 4828 210 4062 231 3038 252 1756	2·502 6691 512 5998 522 4352 532 1762	12·59 12·71 12·83 12·96	0·194 3414 215 8013 237 2347 258 6417	2·493 9247 504 0822 514 1400 524 0987	12·31 12·43 12·55 12·68	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$ \begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array} $	0.273 0218 293 8423 314 6372 335 4067	2·541 8232 551 3767 560 8374 570 2059	13.08 13.31 13.47	0.280 0223 301 3767 322 7049 344 0069	2·533 9591 543 7216 553 3871 562 9556	12·80 12·93 13·06 13·20	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·356 1507 376 8694 397 5627 418 2308	2·579 4828 588 6687 597 7641 606 7698	13.61 13.74 13.88 14.02	0·365 2828 386 5327 407 7566 428 9546	2·572 4285 581 8061 591 0891 600 2783	13·33 13·47 13·60 13·74	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.438 8736 459 4914 480 0841 500 6518	2.615 6865 624 5147 633 2552 641 9086	14·16 14·30 14·45 14·59	0.450 1268 471 2732 492 3939 513 4890	2.609 3742 618 3777 627 2896 636 1104	13.88 14.03 14.17 14.32	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$	0·521 1945 541 7124 562 2054 582 6736	2.650 4758 658 9573 667 3537 675 6661	14·74 14·89 15·04 15·19	0·534 5585 555 6024 576 6209 597 6140	2.644 8410 653 4821 662 0345 670 4989	14·47 14·62 14·77 14·92	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4	0.603 1172 623 5361 643 9304 664 3002	2.683 8949 692 0410 700 1051 708 0879	15·34 15·50 15·66 15·82	0.618 5817 639 5242 660 4415 681 3336	2.678 8763 687 1673 695 3726 703 4933	15.08 15.23 15.39 15.55	358 334 373 4
41 41 43 43 41	0.684 6456 704 9665 725 2631 745 5353	723 8126 731 5562 739 2214	15.98 16.14 16.31 16.47	0·702 2006 723 0425 743 8595 764 6516	2·711 5300 719 4836 727 3550 735 1448	15.72 15.88 16.05 16.21	41 41 43 41 41
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	0.765 7834 786 0072 806 2070 826 3827	2·746 8094 754 3206 761 7559 769 1160	16.64 16.81 16.98 17.16	0.785 4188 806 1613 826 8790 847 5720	750 4834 758 0337 765 5058	16·38 16·56 16·73 16·90	458 434 478 5
51/4 51/4 51/2 51/2	0.846 5343 866 6621 886 7659 906 8459	2·776 4017 783 6139 790 7533 797 8207	17·33 17·51 17·69 17·87	0 868 2404 888 8842 909 5035 930 0984	780 2191 787 4619 794 6299	17.08 17.26 17.44 17.62	5½ 5½ 5½ 5½
5\frac{5}{8} 5\frac{3}{4} 5\frac{7}{8} 6	0·926 9022 946 9347 966 9435 986 9287	2·804 8169 811 7425 818 5985 825 3858	18.05 18.23 18.42 18.70	0.950 6689 971 2150 991 7369 1.012 2346	2·801 7238 808 7447 815 6933 822 5704	17.80 17.99 18.18 18.46	5 ⁵ / ₈ 5 ⁷ / ₈ 6
61 61 63 63 7	1.026 8286 066 6347 106 3475 145 9673	2·838 7563 851 8607 864 7049 877 2951	19.08 19.46 19.86	1.053 1575 093 9843 134 7153 175 3511	2·836 1135 849 3809 862 3790 875 1142	18·84 19·23 19·63 20·03	61 61 61 7
7½ 7½ 7¾ 8	1·185 4947 224 9301 264 2739 303 5265	2·889 6373 901 7374 913 6016 925 2354	20.66 21.07 21.49 21.91	1.215 8920 256 3386 296 6912 336 9502	2·887 5932 899 8222 911 8077 92 3 5557	20.44 20.86 21.28 21.71	7½ 7½ 7¾ 8
81 81 81 83 84 9	1.342 6883 381 7598 420 7414 459 6334	2.936 6447 947 8351 958 8123 969 5815	22·34 22·77 23·21 23·66	1·377 1162 417 1895 457 1706 497 0599	2·935 0724 946 3638 957 4359 968 2943	22°14 22°58 23°02 23°47	81 81 82 83 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	1.498 4364 537 1506 575 7766 614 3147	2.980 1483 990 5179 1.000 6953 010 6857	24·11 24·56 25·02	1.536 8578 576 5648 616 1812 655 7074	2·978 9448 989 3928 999 6439 7·009 7032	23.93 24.39 24.85	9½ 9½ 9¾ 10

	/1 T	Tears		42 Years				
						1		
1001	$\log (1+i)^{41}$	$\log \frac{1}{a_{41}}$	Factor	$\log (1+i)^{42}$	$\log \frac{1}{\hat{s}_{42}}$	Factor	100/	
122	0.088 8085 177 1763	2·431 9475 474 9592	11.62	0.090 9746 181 4977	2·422 5277 466 5062	11.66	1 2	
1½ 1¼ 1¾ 1½	0·199 1999 221 1963 243 1656 265 1077	2·485 4473 495 8305 506 1096 516 2849	12.04 12.16 12.28 12.41	0.204 0585 226 5913 249 0964 271 5738	2·477 2238 487 8319 498 3309 508 7218	11.78 11.91 12.03 12.16	1 1 1 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 1	
158 134 178 2	0.287 0229 308 9111 330 7725 352 6070	2·526 3574 536 3273 546 1959 555 9632	12.54 12.67 12.80 12.93	0°294 0235 316 4456 338 8401 361 2072	2·519 0048 529 1809 539 2509 549 2153	12·28 12·41 12·54 12·68	158 134 178 2	
2½ 2¼ 2¾ 2½ 2½	0°374 4148 396 1960 417 9505 439 6785	2·565 6303 575 1979 584 6666 594 0372	13.06 13.34 13.48	0°383 5469 405 8593 428 1444 450 4023	2·559 0750 568 8309 578 4834 588 0336	12.81 12.95 13.09 13.23	2½ 2¼ 2¾ 2¾ 2½	
25 23 24 27 8	0.461 3800 483 0551 504 7038 526 3262	2.603 3105 612 4872 621 5681 630 5541	13.62 13.77 13.91 14.06	0°472 6331 494 8369 517 0136 539 1634	2·597 4822 606 8299 616 0779 625 2268	13·37 13·52 13·66 13·81	25 23 27 27 3	
31/8 31/4 33/8 31/2	0°547 9224 569 4925 591 0364 612 5543	2.639 4458 648 2442 656 9501 665 5643	14·21 14·36 14·51 14·67	0.561 2864 583 3825 605 4519 627 4947	2.634 2775 643 2307 652 0877 660 8492	13·96 14·11 14·27 14·42	3½ 3¼ 3¾ 3½ 3½	
35 34 37 4	0.634 0463 655 5123 676 9525 698 3669	2.674 0876 682 5209 690 8651 699 1209	14.82 14.98 15.14 15.30	649 5108 671 5004 693 4635 715 4003	2.669 5159 678 0890 686 5693 694 9578	14·58 14·74 14·90 15·06	35 33 37 4	
41 44 43 41 41	0.719 7556 741 1186 762 4560 783 7679	2·707 2894 715 3712 723 3676 731 2791	15.47 15.63 15.80 15.97	0.737 3106 759 1947 781 0525 802 8842	2.703 2553 711 4629 719 5814 727 6118	15·23 15·40 15·57 15·74	41 41 43 41 42	
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	0·805 0543 826 3153 847 5509 868 7613	2·739 1067 746 8514 754 5140 762 0953	16·14 16·31 16·49 16·66	0.824 6898 846 4693 868 2229 889 9506	743 5552 743 4123 751 1842 758 8719	15.91 16.08 16.26 16.44	45 43 47 5	
514 514 538 512	0.889 9464 911 1063 932 2411 953 3508	2·769 5963 777 0181 784 3612 791 6268	16.84 17.02 17.20 17.39	0.911 6524 933 3284 954 9787 976 6033	2·766 4763 773 9984 781 4391 788 7993	16.62 16.80 16.98 17.17	5½ 5½ 5½ 5½	
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	0.974 4356 995 4954 1.016 5304 037 5405	2·798 8156 805 9287 812 9669 819 9311	17·57 17·76 17·95 18·24	0.998 2023 1.019 7758 041 3238 062 8463	2.796 0802 803 2826 810 4074 817 4557	17·36 17·54 17·73 18·02	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
61 61 63 63 7	1.079 4865 121 3339 163 0832 204 7349	2·833 6409 847 0652 860 2112 873 0858	18.62 19.02 19.42 19.83	1.105 8154 148 6835 191 4511 234 1187	2·831 3263 844 9021 858 1904 871 1987	18·42 18·81 19·22 19·63	61 61 63 7	
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	1.246 2893 287 7470 329 1084 370 3740	2·885 6959 898 0482 910 1494 922 0062	20.24 20.66 21.08 21.52	1.276 6866 319 1555 361 5257 403 7977	2·883 9342 896 4043 908 6160 920 5763	20.05 20.47 20.90 21.34	7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	1.411 5441 452 6193 493 5999 534 4864	2·933 6250 945 0122 956 1741 967 1167	21.95 22.40 22.85 23.30	1°445 9720 488 0490 530 0292 571 9129	2·932 2922 943 7702 955 0170 966 0391	21·78 22·23 22·68 23·14	81 81 83 83 9	
9 ¹ / ₂ 9 ¹ / ₂ 9 ³ / ₄ 10	1.575 2793 615 9789 656 5857 697 1001	2·977 8460 988 3679 998 6881 1·008 8121	23.76 24.22 24.69	1.613 7007 655 3930 696 9902 738 4928	2·976 8427 987 4340 997 8190 1·008 0036	23.60 24.07 24.55	9½ 9½ 9¾ 10	

	43	Years		1	4 Year	's	
100/	$\left \left(\log 1 + \boldsymbol{i} \right)^{43} \right $	$\log \frac{1}{\hat{a}_{43}}$	Factor	$\log\left(1+\boldsymbol{i}\right)^{44}$	$\log \frac{1}{a_{44}}$	Factor	100/
1	0.093 1407 185 8191	2·413 3533 458 2959	11.13	0.095 3067 190 1404	2·404 4131 450 3170	10.89	1
1 1 1 1 3 8 1 1 2 2	0.208 9170 231 9864 255 0273 278 0398	2·469 2422 480 0740 490 7919 501 3968	11.54 11.66 11.79 11.91	0.213 7755 237 3814 260 9582 284 5059	2·461 4909 472 5455 483 4812 494 2990	11.31 11.43 11.68	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$ \begin{array}{c c} 1_{8}^{5} \\ 1_{3}^{4} \\ 1_{8}^{7} \\ 2 \end{array} $	0°301 0240 323 9800 346 9077 369 8074	2·511 8894 522 2703 532 5401 542 7002	12.04 12.17 12.30 12.44	0*308 0246 331 5144 354 9754 378 4076	2·504 9997 515 5838 526 0523 536 4061	11.81 11.94 12.07 12.21	$1\frac{5}{6}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0°392 6790 415 5226 438 3383 461 1262	2·552 7508 562 6929 572 5274 582 2553	12·57 12·71 12·85 12·99	0*401 8111 425 1859 448 5323 471 8501	2·546 6460 556 7728 566 7876 576 6911	12·34 12·48 12·62 12·76	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.483 8863 506 6187 529 3235 552 0007	2·591 8772 601 3940 610 8069 620 1163	13·13 13·28 13·43 13·58	0.495 1395 518 4005 541 6333 564 8379	2·586 4842 596 1681 605 7436 615 2117	12.91 13.05 13.35	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3½ 3½ 3½	0.574 6503 597 2726 619 8675 642 4350	2·629 3237 638 4297 647 4353 656 3416	13.48 13.88 14.04 14.19	0.588 0143 611 1627 634 2830 657 3754	2.624 5734 633 8297 642 9818 652 0304	13·50 13·66 13·81 13·97	314 314 318 319 319
358 334 378 4	0.664 9754 687 4885 709 9746 732 4336	2.665 1494 673 8597 682 4736 690 9920	14·35 14·51 14·67 14·84	0.680 4399 703 4766 726 4856 749 4669	2.660 9769 669 8219 678 5668 687 2127	14·13 14·29 14·46 14·62	358 334 378 4
4½ 4½ 4½ 4½	0.754 8656 777 2707 799 6490 822 0005	2.699 4161 707 7466 715 9845 724 1312	15.01 15.17 15.34 15.52	0.772 4206 795 3468 818 2455 841 1168	2.695 7603 704 2113 712 5662 720 8264	14.79 14.96 15.13 15.31	41 41 43 42
458 434 478 5	0·844 3253 866 6234 888 8949 911 1399	740 1543 748 0329 755 8241	15.69 15.87 16.04 16.22	0·863 9607 886 7774 909 5668 932 3292	737 0668 745 0491 752 9411	15.48 15.66 15.84 16.02	45 43 47 5
5\frac{1}{8} 5\frac{1}{4} 5\frac{3}{8} 5\frac{1}{2}	0.933 3584 955 5505 977 7163 999 8558	2·763 5290 771 1485 778 6841 786 1362	16·41 16·59 16·77 16·96	0.955 0644 977 7726 1.000 4539 023 1082	760 7438 768 4582 776 0856 783 6269	16·20 16·39 16·58 16·76	51 51 52 51
558 534 578 6	1.021 9690 044 0562 066 1172 088 1522	2·793 5062 800 7950 808 0037 815 1334	17·15 17·34 17·53 17·82	1.045 7358 068 3365 090 9106 113 4581	2·791 0833 798 4558 805 7457 812 9538	16·95 17·15 17·34 17·64	5 ⁵ / ₈ 5 ⁷ / ₈ 6
61 61 63 63 7	1.132 1444 176 0331 219 8190 263 5024	2.829 1593 842 8808 856 3058 869 4423	18·22 18·62 19·45	1.158 4733 203 3827 248 1869 292 8862	2.827 1295 840 9913 854 5478 867 8072	18·04 18·44 18·85	61 61 63 7
$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8	1·307 0839 350 5640 393 9430 437 2215	2·882 2981 894 8808 907 1978 919 2567	19.87 20.30 20.73 21.17	1.337 4812 381 9724 426 3603 470 6452	2.880 7781 893 4682 905 8857 918 0383	19·70 20·13 20·57 21·02	71 71 73 73 8
8½ 8½ 8¾ 9	1.480 3999 523 4787 566 4584 609 3394	2·931 0646 942 6286 953 9558 965 0528	21.62 22.07 22.53 22.99	1.514 8278 558 9085 602 8877 646 7659	2·929 9336 941 5792 952 9822 964 1500	21.47 21.92 22.39 22.85	81 81 83 83 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	1.652 1222 694 8071 737 3947 779 8855	2·975 9264 986 5829 997 0287 1·007 2699	23·46 23·93 24·41	1.690 5436 734 2212 777 7993 821 2781	2.975 0893 985 8071 996 3098 1.006 6040	23·33 23·80 24·29	9½ 9½ 9¾ 10

	45 \	Tears			6 Year		
100 <i>i</i>	$\log (1 + \mathbf{i})^{45}$	$\log \frac{1}{a_{45}}$	Factor	$\log (1 + \mathbf{i})^{46}$	$\log \frac{1}{a_{46}}$	Factor	100/
1 1 2	0·097 4728 194 4618	2·395 6962 442 5589	10.67	0.099 6388 198 7832	2·387 1930 435 0117	10.46	1 1 2
$\begin{array}{c c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$	0 218 6341 242 7764 266 8890 290 9719	2·453 9596 465 2359 476 3883 487 4178	11.09 11.33 11.46	0·223 4926 248 1715 272 8199 297 4379	2·446 6384 458 1353 469 5033 480 7432	10.87 11.00 11.12 11.25	1
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·315 0251 339 0488 363 0430 387 0077	2·498 3251 509 1112 519 7769 530 3230	11.59 11.72 11.85 11.99	0·322 0257 346 5832 371 1106 395 6079	2·491 8559 502 8425 513 7037 524 4406	11·38 11·51 11·64 11·78	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
2\frac{1}{8} 2\frac{1}{4} 2\frac{3}{5} 2\frac{1}{2}	0.410 9431 434 8493 458 7262 482 5739	2·540 7503 551 0601 561 2531 571 3306	12·12 12·26 12·40 12·55	0.420 0752 444 5126 468 9201 493 2978	2·535 0538 545 5447 555 9144 566 1635	11.92 12.05 12.34	2\frac{1}{4} 2\frac{1}{4} 2\frac{3}{8} 2\frac{1}{2}
25 23 27 8 3	0.506 3927 530 1824 553 9432 577 6751	2·581 2929 591 1417 ·600 8779 610 5023	12.69 12.84 12.99 13.14	0.517 6458 541 9642 566 2530 590 5123	2·576 2935 586 3051 596 1998 605 9785	12·49 12·63 12·78 12·93	25 23 27 27 3
3½ 3¼ 3¾ 3½ 3½	0.601 3783 625 0527 648 6985 672 3157	2.620 0162 629 4206 638 7166 647 9053	13·29 13·45 13·60 13·76	0.614 7422 638 9428 663 1140 687 2561	2.615 6423 625 1925 634 6302 643 9566	13.09 13.40 13.56	3½ 3½ 3½ 3½ 3½
35 334 378 4	0.695 9045 719 4647 742 9967 766 5003	2.656 9879 665 9652 674 8387 683 6094	13.92 14.09 14.25 14.42	0.711 3690 735 4528 759 5077 783 5336	2.653 1729 662 2801 671 2797 680 1727	13.73 13.89 14.06	358 334 378 4
41 41 43 41	0.789 9756 813 4229 836 8420 860 2331	2.692 2785 700 8471 709 3163 717 6873	14.59 14.76 14.93 15.11	0.807 5307 831 4989 855 4385 879 3494	2.688 9605 697 6442 706 2251 714 7045	14·39 14·57 14·74 14·92	41 41 43 41 42
45 43 47 5	0.883 5962 906 9314 930 2388 953 5185	734 1395 742 2231 750 2131	15·28 15·46 15·64 15·83	0.903 2317 927 0855 950 9108 974 7078	2·723 0835 731 3633 739 5454 747 6309	15·10 15·28 15·46 15·64	45 43 47 5
5½ 5¼ 5½ 5½	0.976 7704 999 9947 1.023 1914 046 3607	765 9174 773 6339 781 2617	16.01 16.20 16.39 16.58	0.998 4764 1.022 2168 045 9290 069 6131	2·755 6210 763 5169 771 3201 779 0316	15.83 16.02 16.40	5½ 5½ 5½ 5½
55 53 57 6	1.069 5025 092 6169 115 7040 138 7639	796 2554 803 6235 810 9077	16·77 16·97 17·16 17·46	1.093 2692 116 8973 140 4975 164 0698	794 1847 801 6287 808 9860	16.60 16.79 16.99 17.29	5½ 5¾ 5¼ 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	1.184 8022 230 7324 276 5548 322 2700	2.825 2277 839 2246 852 9074 866 2848	17.86 18.27 18.69 19.11	1.211 1312 258 0820 304 9227 351 6538	2·823 4454 837 5723 851 3763 864 8667	17·70 18·11 18·53 18·96	61 61 63 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	1·367 8785 413 3809 458 7775 504 0690	2·879 3657 892 1584 904 6715 916 9132	19.54 19.98 20.42 20.87	1·398 2758 444 7894 491 1948 537 4928	2·878 0528 890 9435 903 5477 915 8740	19·39 19·83 20·28 20·74	7½ 7½ 7¾ 8
81 81 81 83 83 9	1.549 2557 594 3382 639 3170 684 1924	2·928 8914 940 6141 952 0889 963 3233	21·33 21·79 22·25 22·72	1.583 6836 629 7680 675 7462 721 6189	2·927 9309 939 7266 951 2691 962 5663	21·19 21·66 22·13 22·61	81 81 83 83 9
91 91 93 93 10	1.728 9651 773 6354 818 2038 862 6708	2·974 3246 985 0998 995 6559 1·005 9994	23·20 23·68 24·17	813 0495 858 6083 904 0635	2·973 6258 984 4548 995 0608 1·005 4506	23.09 23.57 24.06	9½ 9½ 9½ 10

	47	Years			l8 Year	'S	
100/	log (1+1)47	log 1/a ₄₇	Factor	$\log (1+i)^{48}$	log 1 # # # # # # # # # # # # # # # # # #	Factor	100/
1	0·101 8049 203 1046	2·378 8942 427 6663	10.25	0°103 9710 207 4259	2·370 7911 420 5142	10.32	1
1 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2	0·228 3511 253 5665 278 7508 303 9040	2·439 5180 451 2346 462 8170 474 2661	10.67 10.79 10.92 11.05	0.233 2097 258 9615 284 6816 310 3700	2·432 5897 444 5249 456 3206 467 9779	10.47 10.60 10.72 10.85	1½ 1½ 1½ 1½ 1½
158 134 178 2	0·329 0263 354 1176 379 1782 404 2081	2·485 5830 496 7686 507 8239 518 7497	11.18 11.31 11.44 11.28	0°336 0268 361 6521 387 2458 412 8082	2·479 4975 490 8808 502 1285 513 2420	10.98 11.11 11.38	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
2\frac{1}{8} 2\frac{1}{4} 2\frac{3}{8} 2\frac{1}{2}	0°429 2073 454 1759 479 1140 504 0217	2·529 5474 540 2177 550 7619 561 1812	11.41 11.85 12.00 12.14	0.438 3393 463 8392 489 3079 514 7455	535 0703 545 7874 556 3748	11.52 11.66 11.81 11.95	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25 23 27 27 3	0.528 8990 553 7460 578 5629 603 3496	2·571 4765 581 6491 591 7002 601 6310	12·29 12·44 12·59 12·74	0.540 1522 565 5279 590 8727 616 1868	2.566 8336 577 1651 587 3706 597 4514	12·10 12·25 12·40 12·55	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
31 314 318 312	0.628 1062 652 8328 677 5296 702 1964	2.611 4426 621 1363 630 7135 640 1752	12·89 13·05 13·21 13·37	0.641 4702 666 7229 691 9451 717 1368	2.607 4086 617 2436 626 9579 636 5527	12.71 12.87 13.03 13.19	3½ 3½ 3½ 3½
358 334 378 4	0.726 8335 751 4410 776 0187 800 5669	2.649 5228 658 7575 667 8807 676 8937	13.24 13.40 13.87 14.04	0.742 2981 767 4291 792 5298 817 6003	2.646 0292 655 3891 664 6335 673 7639	13·35 13·52 13·69 13·86	35 334 37. 4
41 41 43 41 42	0.825 0857 849 5750 874 0350 898 4656	2.685 7977 694 5941 703 2841 711 8691	14.21 14.38 14.56 14.74	0.842 6407 867 6511 892 6314 917 5819	2.682 7817 691 6882 700 4849 709 1731	14.03 14.21 14.39 14.57	4½ 4¼ 4¾ 4¾ 4½
458 434 478 5	0.922 8671 947 2395 971 5828 995 8971	2·720 3504 728 7294 737 0075 745 1858	14.92 15.10 15.28 15.47	0.942 5026 967 3935 992 2547 1.017 0864	2·717 7543 726 2299 734 6012 742 8698	14.75 14.93 15.12 15.31	458 434 478 5
5½ 5½ 5½ 5½	044 4389 068 6666 092 8656	2·753 2657 761 2486 769 1357 776 9283	15.66 15.85 16.04 16.23	1.041 8884 066 6610 091 4042 116 1181	2.751 0370 759 1041 767 0727 774 9441	15.50 15.69 15.88 16.08	51 51 52 52 51
55 53 57 6	1.117 0359 141 1777 165 2909 189 3757	2·784 6279 792 2357 799 7529 807 1809	16·43 16·63 16·83	1·140 8027 165 4580 190 0843 214 6815	790 4007 797 9887 805 4849	16·27 16·47 16·68 16·98	58 53 57 6
61 61 63 7	1.237 4601 285 4316 333 2905 381 0376	2·821 7745 836 0265 849 9469 863 5455	17.54 17.96 18.38 18.82	1.263 7891 312 7812 361 6584 410 4213	2.820 2077 834 5800 848 6121 862 3145	17·39 17·82 18·24 18·68	6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7
71/4 71/2 73/4 8	1·428 6731 476 1978 523 6121 570 9165	2·876 8322 889 8164 902 5073 914 9141	19·25 19·70 20·15 20·61	1·459 0704 507 6063 556 0294 604 3403	2·875 6973 888 7705 901 5440 914 0271	19·12 19·57 20·03 20·49	$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8
81 81 83 83 9	1.618 1115 665 1977 712 1755 759 0454	2·927 0454 938 9102 950 5166 961 8729	21.07 21.54 22.01 22.49	1.652 5394 700 6274 748 6047 796 4719	2.926 2291 938 1591 949 8248 961 2378	20.96 21.43 21.90 22.39	81 81 83 83 9
9½ 9½ 9¾ 10	1.805 8079 852 4636 899 0129 945 4562	2·972 9871 983 8667 994 5194 1·004 9522	22.98 23.47 23.96	1.844 2294 891 8777 939 4174 986 8489	2·972 4033 983 3303 994 0266 1·004 4997	22.88 23.37 23.87	9½ 9½ 9¾ 10

	49 Y	ears		50 Years			
		log 1	Footor	50	100 1	1	1002
1001	$\log \left(1+\boldsymbol{I}\right)^{49}$	8 ₄₉	Factor		a ₅₀	Factor	1001
1 1 2	0·106 1370 211 7473	2·362 8757 413 5469	9·87 10 16	0·108 3031 216 0687	2·355 1403 406 7569	9. 69	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0°238 0682 264 3566	2·425 8455 437 9983	10°41	0°242 9267 269 7516	2·419 2778 431 6472	10.11	1 to
13/8 11/2	290 6125 316 8361	450 0062 461 8703	10.24	296 5434 323 3021	443 8671 455 9357	10.36	18 11
15 13	0°343 0274 369 1865	2·473 5915 485 1710	10.79	0°350 0279 376 7209	2·467 8572 479 6316	10.62	15 13
$\frac{1\frac{7}{8}}{2}$	395 3135 421 4084	496 6098 507 9093	11.06	403 3811 430 0086	491 2601 502 7440	10.88	1 ½ 2 × 2
2½ 2¼	0°447 4714 473 5025	2·519 0705 530 0945	11.48	0.456 6035	2·514 0844 525 2828	11.19	2½ 2½
$2\frac{3}{8}$ $2\frac{1}{2}$	499 5018 525 4694	540 9827 551 7364	11.62	509 6957 536 1933	536 3403 547 2584	11.45	2\frac{3}{8} 2\frac{1}{2}
$\frac{2\frac{5}{8}}{2\frac{3}{4}}$	0·551 4053 577 3097	2·562 3568 572 8452	11.92	0.562 6585 589 0915	2·558 0384 568 6818	11.74	25 23
2½ 3	603 1826 629 0240	583 2031 593 4316	12.38	615 4924 641 8612	579 1899 589 5642	12.02	2 ⁷ / ₈
3 ¹ / ₈ 3 ¹ / ₄	0.654 8341 680 6130	2·603 5323 613 5065	12.53	0.668 1981 694 5030	2·599 8062 609 9173	12.36	3 ¹ / ₈ 3 ¹ / ₄
3 ³ / ₈ 3 ¹ / ₂	706 3606 732 0771	623 3556 633 0811	12.85	720 7761 747 0175	619 8991 629 7531	12.69	3\frac{3}{5} 3\frac{1}{2}
35 33 34	0.757 7626 783 4172	2.642 6844 652 1669	13.32	0·773 2272 799 4053	2·639 4808 649 0837	13.02	35 33
37 4	809 0408 834 6336	661 5302 670 7756	13.52	825 5518 851 6670	658 5635 667 9216	13.29	3 ⁷ / ₈ 4
4½ 4½	0.860 1957 885 7271	2·679 9048 688 9189	13.87	0·877 7507 903 8032	2·677 1596 686 2791	13.41	41 41
43 41 41	911 2279 936 6982	697 8198 706 6087	14.40	929 8244 955 8145	695 2817 704 1690	14.07	43 41 2
45 43	0.962 1381 987 5475	2·715 2873 723 8571	14.59	0.981 7736	2·712 9424 721 6037	14.43	45 43
47 5	1.012 9267 038 2757	732 3193 740 6757	14.96	033 5987 059 4650	730 1545 738 5961	14.81	4 ⁷ / ₈ 5
5 ¹ / ₈ 5 ¹ / ₄	1.063 5944 088 8831	2·748 9276 757 0765	15.24	111 1052	2·746 9304 755 1588	15.19	5 ¹ / ₃
5 ³ / ₈ 5 ¹ / ₂	114 1418	765 1241 773 0716	15 73	136 8794 162 6230	763 2828 771 3041	15.58	5\\\ 5\\\\ 5\\\\\ 2
55 53	1°164 5694 189 7384	2·780 9206 788 6725	16.33	1·188 3361 214 0188	2·779 2242 787 0446		5 ⁵ / ₈ 5 ³ / ₄
57 6	214 8777 239 9874	796 3287 803 8909	16.23	239 6712 265 2933	794 7669 802 3925		5 ⁷ / ₈ 6
61	1.290 1180	2·818 7384 833 2262	17.26	1·316 4469 367 4804	2·817 3600 831 9589		6 ¹ / ₂
6½ 6¾ 7	340 1308 390 0263 439 8051	847 3654 861 1671	18.22	418 3942 469 1889	846 2009 860 0974	17.99	6 ³ / ₄ 7
74	1.489 4677	2.874 6417	19.00	1.519 8650	2·873 6598 886 8989	18.88	7½ 7½
7½ 7¾ 8	539 0148 588 4467 637 7640	887 7999 900 6518 913 2074	19.45	620 8639 671 1878	899 8255 912 4498	19.80	7 ³ / ₄ 8
81/4	1.686 9673	2.925 4763	20.85	1·721 3953 771 4869	2·924 7821 936 8320	20.75	8½ 8½
8½ 8¾ 9	736 0572 785 0340 833 8984	937 4680 949 1916 960 6559	21.81 51.35	821 4633 871 3249	948 6092 960 1228	21.71	834
91	1.882 6508	2.971 8696	22.79	1.921 0723	2.971 3817	22.70	9 ₁ 9 ₁
9½ 9¾	931 2918 979 8219	982 8410	23.28	970 7060 2.020 2264	982 3946	23.41	93
10	2.028 2416	1·004 0887		069 6343	1.003 7124		10

	51 \	Tears		52 Years			
100/	$\log (1+i)^{51}$	$\log \frac{1}{\hat{a}_{51}}$	Factor	$\log (1+i)^{52}$	$\log \frac{1}{a_{52}}$	Factor	100 <i>i</i>
1 1 2	0·110 4692 220 3901	2·347 5777 400 1373	9.51	0·112 6352 224 7114	2·340 1812 393 6810	9.35	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·247 7853 275 1466 302 4742 329 7682	2·412 8794 425 4644 437 8933 450 1673	9.93 10.06 10.18	0.252 6438 280 5417 308 4051 336 2342	2·406 6435 419 4430 432 0808 444 5580	9.77 9.89 10.02 10.15	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·357 0285 384 2553 411 4487 438 6088	2·462 2876 474 2555 486 0721 497 7388	10·44 10·58 10·71 10·85	0·364 0290 391 7897 419 5163 447 2089	2·456 8759 469 0359 481 0392 492 8873	10·28 10·41 10·55 10·69	15 13 17 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.465 7355 492 8292 519 8897 546 9171	2·509 2570 520 6279 531 8529 542 9336	10·99 11·14 11·28 11·43	0.474 8676 502 4925 530 0836 557 6410	2·504 5814 516 1232 527 5140 538 7555	10·83 10·97 11·12 11·27	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25 23 24 27 3	0.573 9117 600 8734 627 8023 654 6985	2·553 8714 564 6678 575 3241 585 8421	11·58 11·73 11·88 12·04	0.585 1648 612 6552 640 1121 667 5357	2·549 8490 560 7964 571 5990 582 2586	11·42 11·57 11·73 11·88	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
31 31 33 33 32	0.681 5620 708 3931 735 1917 761 9578	2·596 2233 606 4692 616 5814 626 5617	12·20 12·36 12·52 12·69	0.694 9260 722 2831 749 6072 776 8982	2·592 7769 603 1555 613 3961 623 5003	12·04 12·21 12·37 12·54	3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}
$\begin{array}{c} 3\frac{5}{8} \\ 3\frac{3}{4} \\ 3\frac{7}{8} \\ 4 \end{array}$	0.788 6917 815 3934 842 0629 868 7003	2.636 4115 646 1325 655 7264 665 1948	12.86 13.03 13.20 13.38	0·804 1563 831 3815 858 5739 885 7336	2.633 4700 643 3069 653 0126 662 5890	12.71 12.88 13.05 13.23	358 334 378 4
41 41 43 41 42	0·895 3057 921 8792 948 4209 974 9308	2·674 5395 683 7619 692 8638 701 8469	13.55 13.73 13.92 14.10	0.912 8607 939 9553 967 0174 994 0471	2.672 0378 681 3608 690 5598 699 6365	13·41 13·59 13·77 13·96	41 41 43 41 41
45 43 47 47 5	1.001 4090 027 8556 054 2707 080 6543	2·710 7130 719 4635 728 1003 736 6249	14·28 14·47 14·66 14·86	048 0096 074 9426 101 8436	2·708 5926 717 4301 726 1506 734 7558	14·14 14·33 14·53 14·72	458 434 478 5
51 51 52 51 51 51	1.107 0064 133 3273 159 6170 185 8754	753 3445 761 5427 769 6355	15.05 15.25 15.45 15.65	1·128 7125 155 5494 182 3546 209 1279	2·743 2476 751 6277 759 8978 768 0596	14·92 15·11 15·32 15·52	5½ 5½ 5½ 5½ 5½
558 534 578 6	1·212 1028 238 2992 264 4646 290 5991	785 5108 793 2968 800 9836	15.85 16.05 16.26 16.57	1.235 8695 262 5796 289 2580 315 9050	784 0654 791 9128 799 6587	15·72 15·93 16·14 16·45	5 ⁵ / ₈ 5 ⁷ / ₈ 6
61 62 63 7	1·342 7759 394 8300 446 7621 498 5727	2·816 0666 830 7722 845 1127 859 1002	17.00 17.43 17.87 18.32	1·369 1048 422 1796 475 1300 527 9564	2·814 8528 829 6609 844 0958 858 1702	16.88 17.32 17.76 18.21	61 62 63 7
71 71 72 734 8	1.550 2623 601 8317 653 2812 704 6115	2·872 7463 886 0625 899 0600 911 7495	18·77 19·23 19·70 20·17	1.580 6596 633 2401 685 6985 738 0353	2.871 8962 885 2858 898 3507 911 1022	18.67 19.14 19.61 20.08	7½ 7½ 7¾ 8
81 81 82 83 9	1.755 8232 806 9166 857 8925 908 7514	2·924 1417 936 2466 948 0743 959 6342	20.65 21.14 21.63 22.12	1.790 2511 842 3464 894 3218 946 1779	2·923 5510 935 7079 947 5831 959 1865	20·56 21·05 21·55 22·04	81 81 83 83 9
91 91 93 93 10	1.959 4937 2.010 1201 060 6310 111 0269	2·970 9356 981 9874 992 7982 1·003 3763	22.62 23.13 23.63	1.997 9152 2.049 5342 101 0355 152 4196	2·970 5277 981 6158 992 4598 1·003 0683	22·55 23·05 23·57	91 91 93 10

53 Years				54 Years				
100 <i>i</i>	$\log (1+i)^{53}$	$\log \frac{1}{a_{53}}$	Factor	$\log (1+i)^{54}$	$\log \frac{1}{a_{54}}$	Factor	100/	
1 1 2	0.114 8013	2·332 9445 387 3820	9·18 9·48	o·116 9673 233 3542	2·325 8616 381 2339	9.03	1 1 2	
18 14 13 18 11	0·257 5023 285 9367 314 3360 342 7002	2·400 5637 413 5768 426 4223 439 1015	9·61 9·73 9·86 9·99	0·262 3609 291 3317 320 2668 349 1663	2·394 6343 407 8599 420 9119 433 7919	9·45 9·58 9·70 9·84	$ \begin{array}{r} 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{8}} \\ 1_{\frac{1}{2}} \end{array} $	
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0·371 0296 399 3241 427 5840 455 8091	2·451 6158 463 9664 476 1550 488 1828	10·12 10·26 10·39 10·53	0·378 0302 406 8586 435 6516 464 4093	2·446 5012 459 0412 471 4135 483 6196	9.97 10.10 10.24 10.38	$ \begin{array}{c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array} $	
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0·483 9997 512 1558 540 2775 568 3649	2·500 0514 511 7623 523 3172 534 7176	10.67 10.82 10.96 11.11	0·493 1318 521 8191 550 4714 579 0887	2·495 6610 507 5394 519 2565 530 8140	10·52 10·67 10·82 10·97	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	
258 234 278 3	0·596 4180 624 4370 652 4220 680 3729	2·545 9651 557 0615 568 0085 578 8078	11·26 11·42 11·57 11·73	0.607 6712 636 2188 664 7318 693 2101	2·542 2136 553 4571 564 5464 575 4832	11·12 11·27 11·43 11·59	25 23 27 27 3	
3½ 3½ 3½ 3½ 3½	0.708 2900 736 1732 764 0227 791 8385	2·589 4609 599 9700 610 3367 620 5628	11.89 12.06 12.22 12.39	0·721 6539 750 0633 778 4382 806 7789	2·586 2695 596 9069 607 3976 617 7435	11.75 11.92 12.08 12.25	3½ 3½ 3½ 3½ 3½	
358 334 378 4	0.819 6208 847 3696 875 0850 902 7670	2.630 6502 640 6006 650 4160 660 0981	12·56 12·74 12·91 13·09	0.835 0854 863 3577 891 5960 919 8003	2·627 9462 638 0081 647 9308 657 7164	12·42 12·60 12·77 12·95	35 334 378 4	
41/4 41/4 43/8 41/2	0.930 4158 958 0314 985 6139 1.013 1634	2.669 6488 679 0702 688 3638 697 5317	13·27 13·45 13·63 13·82	0.947 9708 976 1074 1.004 2104 032 2797	2.667 3668 676 8842 686 2702 695 5271	13·13 13·32 13·50 13·69	41 41 43 41 42	
45 43 47 47 5	1.040 6800 068 1637 095 6146 123 0328	2·706 5758 715 4978 724 2997 732 9832	14.01 14.20 14.40 14.59	1.060 3154 088 3177 116 2866 144 2221	2·704 6567 713 6610 722 5420 731 3016		458 4834 478 5	
5½ 5½ 5½ 5½	1.150 4185 177 7715 205 0921 232 3804	750 0028 758 3425 766 5712	14·79 14·99 15·19	1·172 1245 199 9936 227 8297 255 6328	2·739 9418 748 4645 756 8716 765 1651	14.67 14.87 15.07 15.28	51/4 51/4 53/8 51/2	
558 534 578 6	1.259 6363 286 8599 314 0514 341 2109	2·774 6907 782 7030 790 6096 798 4125	15.60 15.81 16.02 16.34	1·283 4030 31 1 1403 338 8449 366 51 6 7	2·773 3467 781 4186 789 3824 797 2399	15.91	55 53 57 6	
6½ 6½ 6¾ 7	1·395 4338 449 5292 503 4978 557 3402	2·813 7135 828 6200 843 1455 857 3029	16·77 17·21 17·66 18·13	1.421 7627 476 8788 531 8657 586 7240	2·812 6440 827 6450 842 2570 856 4939	17.11	61 62 63 7	
7½ 7½ 7¾ 8	1.611 0569 664 6486 718 1158 771 4590	2·871 1051 884 5646 897 6935 910 5036	18·57 19·04 19·52 20·00	1.641 4542 696 0571 750 5331 804 8828	2·870 3688 883 8948 897 0845 909 9500	18·48 18·95 19·43	7½ 7½ 7¾ 8	
81/4 81/2 83/4 9	1.824 6790 877 7761 930 7511 983 6044	2·923 0060 935 2119 947 1319 958 7761	20.48 20.97 21.47 21.97	1.859 1069 913 2059 967 1803 2.021 0309	2·922 5032 934 7553 946 7174 958 4000	21.40	81 81 83 83 9	
91 91 92 93 10	2.036 3366 088 9483 141 4400 193 8123	2·970 1546 981 2767 992 1518 1·002 7885	22·48 22·99 23·50	2.074 75 81 128 3624 181 8446 235 2050	2·969 8134 980 9673 991 8712 1·002 5342		9 ¹ 9 ¹ 9 ³ 10	

		Zears	ANNUI	56 Years				
1001	$\log (1+i)^{55}$	$\log \frac{1}{a_{55}}$	Factor	EU	$\log \frac{1}{a_{56}}$	Factor	100 <i>i</i>	
1 1 2	0°119 1334 237 6756	2·318 9267 375 2313	8.88	0.121 2995	2·312 1345 369 3688	8·74 9·04	1 2	
$\begin{array}{c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$	0·267 2194 296 7268 326 1977 355 6323	2·388 8493 402 2863 415 5439 428 6234	9.30 9.43 9.56 9.69	0·272 0779 302 1218 332 1286 362 0984	2·383 2034 396 8510 410 3130 423 5909	9·16 9·28 9·41 9·55	$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}$	
15/8 13/4 17/8 2	0°385 0307 414 3930 443 7192 473 0094	2·441 5264 454 2546 466 8090 479 1918	9.82 9.96 10.09 10.24	0·392 0313 421 9274 451 7868 481 6096	2·436 6864 449 6011 462 3364 474 8944	9.68 9.82 9.95 10.10	$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}$	
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.502 2638 531 4824 560 6653 589 8126	2·491 4045 503 4487 515 3264 527 0392	10.38 10.52 10.67 10.82	0.511 3959 541 1457 570 8592 600 5365	2·487 2766 499 4850 511 5215 523 3878	10.24 10.39 10.69	$egin{array}{c} 2rac{1}{8} \ 2rac{1}{4} \ 2rac{3}{8} \ 2rac{1}{2} \end{array}$	
25/8 23/4 27/8 3	0.618 9244 648 0007 677 0417 706 0474	2·538 5890 549 9778 561 2075 572 2798	10.98 11.13 11.45	0.630 1775 659 7825 689 3515 718 8846	2·535 0861 546 6181 557 9862 569 1922	10.84 11.00 11.12 11.32	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	
3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}	0.735 0179 763 9533 792 8537 821 7192	2·583 1969 593 9607 604 5733 615 0366	11.61 11.48 11.95	0.748 3818 777 8434 807 2693 836 6596	2.580 2381 591 1262 601 8585 612 4373	11.48 11.65 11.82 11.99	31 31 38 31 38 31 2	
358 334 378 4	0.850 5499 879 3458 908 1070 936 8337	2.625 3528 635 5238 645 5517 655 4385	12·29 12·47 12·64 12·82	0.866 0144 895 3339 924 6181 953 8670	2.622 8645 633 1426 643 2735 653 2596	12·16 12·34 12·52 12·70	358 334 378 4	
4 1 4 4 4 3 8 4 1 2	0.965 5258 994 1835 1.022 8069 051 3960	2.665 1865 674 7975 684 2738 693 6174	13°01 13°19 13°57	0.983 0808 1.012 2596 041 4034 070 5123	2.663 1027 672 8054 682 3696 691 7978	12.88 13.07 13.26 13.45	418 414 428 42	
458 434 478 5	1.079 9509 108 4717 136 9586 165 4114	2·702 8303 711 9148 720 8727 729 7062	13.76 13.95 14.15 14.35	1.099 5864 128 6258 157 6305 186 6007	2·701 0920 710 2544 719 2869 728 1922	13.64 13.84 14.04 14.24	458 434 478 5	
5½ 5½ 5½ 5½ 5½	1.193 8305 222 2157 250 5673 278 8853	2·738 4173 747 0080 755 4805 763 8364	14.55 14.75 14.96 15.17	1·215 5365 244 4379 273 3049 302 1377	2.736 9720 745 6287 754 1642 762 5808	14.44 14.64 14.85 15.06	51/8 51/4 52/8 51/2	
5\frac{5}{8}\$ 5\frac{3}{4}\$ 5\frac{7}{8}\$ 6	335 4207 363 6383 391 8226	780 2075 788 2264 796 1368	15·38 15·59 15·80 16·13	1.330 9364 359 7011 388 4317 417 1285	2·770 8805 779 0653 787 1374 795 0986	15·27 15·49 15·70 16·03	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	
61 61 63 63 7	1.448 0916 504 2284 560 2336 616 1078	2.811 6397 826 7315 841 4264 855 7391	16·57 17·04 17·47 17·93	1.474 4206 531 5780 588 6015 645 4916	2. 810 6966 825 8753 840 6498 855 0350	16·47 16·92 17·38 17·84	6½ 6½ 6¾ 7	
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	727 4655 782 9503 838 3066	2.869 6834 883 2727 896 5200 909 4381	18·40 18·87 19·35 19·84	1.702 2489 758 8740 815 3676 871 7303	2.869 0453 882 6947 895 9969 908 9647	18·32 18·79 19·28 19·77	$\begin{array}{c} 7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8 \end{array}$	
81 81 83 83 9	1.893 5348 948 6356 2.003 6096 058 4574	2·922 0392 934 3349 946 3366 958 0552	20·33 20·83 21·84	1.927 9627 984 0653 2.040 0389 095 8839	2.921 6109 933 9477 945 9867 957 7391	20·26 20·77 21·27 21·78	8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	
$ \begin{array}{c c} 9_{\frac{1}{4}} \\ 9_{\frac{1}{2}} \\ 9_{\frac{3}{4}} \\ 10 \end{array} $	2·113 1795 167 7766 222 2491 276 5977	2.969 5013 980 6849 991 6158 1.002 3032	22·35 22·87 23·39	2°151 6010 207 1907 262 6536 317 9904	2.969 2158 980 4272 991 3832 1.002 0933	22·30 22·82 23·34	9½ 9½ 9¾ 10	

	57 Y	Tears		5	8 Year	'S	
100 <i>i</i>	$\log (1+i)^{57}$	$\log \frac{1}{a_{57}}$	Factor	$\log (1 + \boldsymbol{i})^{58}$	$\log \frac{1}{a_{58}}$	Factor	100/
1 2	0.123 4655 246 3183	2·305 4799 363 6413	8·60 8·90	0·125 6316 250 6397	2·298 9581 358 0440	8·46 8·76	1 2
$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$	0·276 9365 307 5168 338 0594 368 5644	2·377 6916 391 5487 405 2139 418 6890	9.02 9.15 9.28 9.41	0·281 7950 312 9119 343 9903 375 0304	2·372 3091 386 3747 400 2421 413 9132	8·89 9·01 9·14 9·28	1 1 1 1 3 8 1 1 2
$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2	0·399 0318 429 4618 459 8544 490 2098	2·431 9757 445 9755 457 9994 470 7220	9.54 9.68 9.82 9.96	0°406 0324 436 9962 467 9221 498 8100	2·427 3897 440 6734 453 7662 466 6700	9.41 9.55 9.69 9.83	15 13 17 8 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0°520 5280 550 8091 581 0531 611 2603	2•483 2723 495 6432 507 8367 519 8548	10·10 10·25 10·40 10·55	0.529 6600 560 4724 591 2471 621 9842	2·479 3867 491 9185 504 2673 516 4354	9°97 10°12 10°27 10°43	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$egin{array}{c} 2rac{5}{8} \ 2rac{3}{4} \ 2rac{7}{8} \ 3 \ \end{array}$	0.641 4307 671 5643 701 6613 731 7218	2·531 6996 543 3731 554 8776 566 2152	10.41 10.87 11.03 11.19	0.652 6839 683 3462 713 9712 744 5590	2·528 4249 540 2381 551 8772 563 3442	10.28 10.24 10.30 11.06	25 23 27 27 8 3
$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$	0.761 7458 791 7334 821 6848 851 5999	2·577 3881 588 3984 599 2485 609 9406	11·35 11·52 11·86	0.775 1098 805 6235 836 1003 866 5403	2.574 6421 585 7728 596 7385 607 5419	11·23 11·40 11·57 11·74	3 ¹ / ₈ 3 ¹ / ₄ 3 ³ / ₈ 3 ¹ / ₂
3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4	0.881 4790 911 3220 941 1291 970 9003	2.620 4769 630 8599 641 0916 651 1745	12.04 12.22 12.40 12.58	0·896 9435 927 3101 957 6401 987 9337	2.618 1852 628 6709 639 0014 649 1791	11.92 12.10 12.28 12.47	35 33 37 4 4
$4\frac{1}{8}$ $4\frac{1}{4}$ $4\frac{3}{8}$ $4\frac{1}{2}$	1.000 6358 030 3356 059 9998 089 6286	2.661 1109 670 9029 680 5530 690 0637	12.77 12.95 13.14 13.34	1*018 1908 048 4117 078 5963 108 7448	2.659 2066 669 0858 678 8198 688 4106	12.65 12.84 13.03 13.23	418 414 428 412
$\begin{array}{c} 4\frac{5}{8} \\ 4\frac{3}{4} \\ 4\frac{7}{8} \\ 5 \end{array}$	1·119 2218 148 7798 178 3025 207 7900	2.699 4369 708 6750 717 7803 726 7552	13.53 13.73 13.93 14.13	1°138 8573 168 9338 198 9745 228 9793	2.697 8608 707 1727 716 3485 725 3910	13.42 13.62 13.82 14.03	458 434 478 5
5 ¹ / ₈ 5 ¹ / ₄ 5 ³ / ₈ 5 ¹ / ₂	1.237 2425 266 6600 296 0425 325 3902	2·735 6017 744 3223 752 9190 761 3940	14°33 14°54 14°75 14°96	1.258 9485 288 8821 318 7801 348 6427	751 7404 760 2721	14°23 14°44 14°65 14°86	51/4 3/8 51/2 51/2
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	1·354 7032 383 9814 413 2251 442 4343	2·769 7498 777 9880 786 1113 794 1215	15·17 15·39 15·61 15·93	1·378 4699 408 2618 438 0186 467 7402	2·768 6819 776 9718 785 1444 793 2016	15.08 15.30 15.51 15.85	558 534 578 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	1.500 7495 558 9276 616 9694 674 8753	2·809 8110 825 0731 839 9235 854 3779	16·38 16·83 17·30 17·76	1·527 0784 586 2773 645 3373 704 2591	2·808 9790 824 3211 839 2443 853 7647	16·30 16·75 17·22 17·69	6½ 6½ 6¾ 7
$\begin{array}{c c} 7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8 \end{array}$	1.732 6462 790 2825 847 7849 905 1541	2.868 4512 882 1578 895 5118 908 5268	18·24 18·72 19·21 19·70	1.763 0435 821 6909 880 2022 938 5778	2·867 8979 881 6589 895 0622 908 1218	18·17 18·65 19·14 19·64	7½ 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	1.962 3906 2.019 4951 076 4681 133 3104	2·921 2158 933 5912 945 6652 957 4493	20·20 20·71 21·22 21·73	1.996 8185 2.054 9248 112 8974 170 7369	2·920 8510 933 2629 945 3698 957 1836	20·14 20·65 21·16 21·68	81 81 83 9
9½ 9½ 9¾ 10	2·190 0224 246 6048 303 0581 359 3831	2·968 9547 980 1920 991 1 714	22·25 22·77 23·30	2·228 4438 286 0189 343 4627	2·968 7159 979 9773 990 9785 1·001 7293	22·20 22·72 23·25	9½ 9½ 9¾ 10

	59 3	Years		6	30 Year	's	
100%	$\log (1+i)^{59}$	$\log \frac{1}{\tilde{a}_{59}}$	Factor	$\log (1+i)^{60}$	$\log \frac{1}{a_{60}}$	Factor	100 <i>i</i>
12	0·127 7976 254 9611	$\overline{2} \cdot 292 5645 \\ 352 5723$	8·33 8·63	0·129 9637 259 2824	2·286 2948 347 2217	8.21	12
$\begin{array}{c c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$	0.286 6535 318 3069 349 9212 381 4965	2·367 0512 381 3243 395 3928 409 2587	8·76 8·89 9·01 9·15	0.291 5121 323 7019 355 8520 387 9625	2·361 9137 376 3932 390 6618 404 7213	8.63 8.76 8.89 9.02	$\begin{array}{c} 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{8}} \\ 1_{\frac{1}{2}} \end{array}$
$\begin{array}{ c c c }\hline 1_{\frac{5}{8}} \\ 1_{\frac{3}{4}} \\ 1_{\frac{7}{8}} \\ 2 \\ \end{array}$	0°413 0330 444 5307 475 9897 507 4101	2·422 9239 436 3901 449 6594 462 7338	9·28 9·42 9·56 9·70	0°420 0335 452 0651 484 0573 516 0103	2·418 5738 432 2212 445 6657 458 9093	9·16 9·30 9·44 9·58	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.538 7921 570 1357 601 4410 632 7081	2·475 6155 488 3064 500 8089 513 1252	9.85 10.00 10.12 10.30	0.547 9242 579 7990 611 6349 643 4319	2·47I 954I 484 8026 497 457I 509 9199	9.73 9.88 10.03 10.18	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25/8 23/4 27/8 3	0.663 9370 695 1280 726 2810 757 3963	2·525 2577 537 2085 548 9803 560 5753	10.46 10.62 10.78 10.95	706 9098 738 5909 770 2335	2·522 1935 534 2802 546 1827 557 9035	10·34 10·50 10·66 10·83	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½	0.788 4737 819 5136 850 5158 881 4806	2·571 9959 .583 2447 594 3241 605 2367	11·11 11·28 11·45 11·63	0.801 8377 833 4036 864 9314 896 4210	2.569 4452 580 8102 592 0013 603 0211	11.00 11.17 11.34 11.52	3 1 3 3 8 3 1 2 2 3 3 8 3 1 2 2 3 3 8 3 1 2 2 3 3 8 3 1 3 3 8 3 1 3 3 8 3 1 3 3 8 3 1 3 3 8 3 1 3 3 8 3 3 3 8 3 3 3 3
3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4	0.912 4081 943 2982 974 1512 1.004 9670	2.615 9850 626 5714 636 9986 647 2691	11.81 11.99 12.17 12.36	0°927 8726 959 2863 990 6622 1°022 0004	2.613 8722 624 5574 635 0792 645 4404	11.70 11.88 12.06 12.25	358 334 378 4
4½ 4¼ 4¾ 4½ 4½	1.035 7458 066 4878 097 1928 127 8611	2.657 3854 667 3501 677 1657 686 8347	12·54 12·73 12·93 13·12	1.053 3009 084 5638 115 7893 146 9774	2.655 6436 665 6914 675 5867 685 3319	12·44 12·63 12·83 13·02	41 41 43 41 41
458 434 478 5	1.158 4928 189 0879 219 6465 250 1686	2.696 3597 705 7432 714 9877 724 0957	13·32 13·52 13·72 13·93	1·178 1283 209 2419 240 3184 271 3579	2.694 9298 704 3830 713 6941 722 8657	13·22 13·42 13·63 13·84	45 43 47 8 5
51/551/551/551/551/551/551/551/551/551/	1.280 6545 311 1042 341 5177 371 8951	2·733 0696 741 9119 750 6250 759 2114	14·14 14·35 14·56 14·77	333 3263 364 2553 395 1476	2·731 9003 740 8007 749 5691 758 2082	14.04 14.26 14.47 14.68	5½ 5½ 5½ 5½
558 534 578 6	1°402 2366 432 5422 462 8120 493 0461	76 0130 784 2330 792 3356	14.99 15.21 15.43 15.76	1.426 0033 456 8226 487 6054 518 3519	775 1082 783 3741 791 5202	14.90 15.12 15.34 15.68	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	1.553 4074 613 6269 673 7051 733 6429	2.808 1975 823 6162 838 6089 853 1924	16·21 16·67 17·14 17·62	1·579 7363 640 9765 702 0730 763 0267	2.807 4632 822 9553 838 0146 852 6582	16·14 16·60 17·07 17·55	61 61 63 7
71 71 73 73 8	1.793 4408 853 0994 912 6194 972 0016	2.867 3827 881 1953 894 6453 907 7470	18·10 18·59 19·58	1.823 8381 884 5079 945 0367 2.005 4253	2.866 9028 880 7646 894 2588 907 4004	18.03 18.53 19.02 19.53	7¼ 7½ 7¾ 8
81 81 83 83 9	2.031 2464 090 3546 149 3267 208 1634	2.920 5143 932 9605 945 0983 956 9401	20.09 20.60 21.11 21.63	2.065 6743 125 7843 185 7559 245 5899	2.920 2035 932 6820 944 8489 956 7167	20.03 20.22 21.07 21.29	81 81 83 83 9
91 91 92 93 10	2·266 8653 325 4330 383 8672 442 1684	2·968 4973 979 7813 990 8027 1·001 5718	22·16 22·68 23·21	2·305 2867 364 8472 424 2717 483 5611	2·968 2974 979 6024 990 6427 1·001 4287	22°11 22°64 23°18	9½ 9½ 9¾ 10

	61 7	Tears			32 Year	'S	01
100 <i>i</i>	$\log (1+i)^{61}$	$\log \frac{1}{a_{61}}$	Factor	$\log (1 + \mathbf{i})^{62}$	$\log \frac{1}{a_{62}}$	Factor	100/
1 1 2	0·132 1298 263 6038	2·280 1449 341 9882	8·08 8·39	0·134 2958 267 9252	2·274 1108 336 8680	7·97 8·27	12
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·296 3706 329 0969 361 7829 394 4286	2·356 8924 371 5774 386 0449 400 2969	8·51 8·64 8·77 8·90	0·301 2291 334 4920 367 7138 400 8946	2·351 9835 366 8729 381 5381 395 9815	8·40 8·52 8·65 8·79	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
158 134 178 2	0°427 0341 459 5995 492 1249 524 6105	2·414 3355 428 1625 441 7808 455 1919	9.04 9.18 9.46	0.434 0346 467 1339 500 1925 533 2107	2·410 2047 424 2104 438 0008 451 5782	8·92 9·06 9·21 9·35	158 134 178 2
2\frac{1}{8} 2\frac{1}{4} 2\frac{3}{8} 2\frac{1}{2}	0.557 0562 589 4623 621 8288 654 1558	2·468 3985 481 4031 494 2078 506 8153	9.61 9.76 9.91 10.02	0.566 1883 599 1256 632 0227 664 8797	2·464 9450 478 1038 491 0572 503 8078	9.50 9.65 9.80 9.96	2½ 2½ 2½ 2½
25 23 27 27 3	0.686 4434 718 6917 750 9007 783 0707	2·519 2283 531 4491 543 4806 555 3253	10·23 10·39 10·55 10·72	0.697 6965 730 4735 763 2106 795 9079	2·516 3583 528 7114 540 8699 552 8367	10·12 10·28 10·45 10·61	2 ⁵ / ₈ 2 ³ / ₄ 2 ⁷ / ₈ 3
3½ 3¼ 3½ 3½	0.815 2017 847 2937 879 3469 911 3613	2·566 9859 578 4652 589 7661 600 8911	10.89 11.06 11.41	0.828 5656 861 1837 893 7624 926 3017	2·564 6145 576 2062 587 6147 598 8430	10.78 10.96 11.13 11.31	3 ¹ / ₈ 3 ¹ / ₄ 3 ⁸ / ₁ 3 ¹ / ₂
35 334 378 4	0°943 3372 975 2744 1°007 1732 039 0337	2.611 8431 622 6250 633 2394 643 6893	11.59 11.78 11.96 12.15	0.958 8017 991 2625 1.023 6843 056 0670	2.609 8939 620 7705 631 4756 642 0122	11.49 11.68 11.86	358 334 378 4
41 41 43 41 42	1.070 8559 102 6399 134 3858 166 0937	2.653 9773 664 1064 674 0793 683 8987	12·34 12·53 12·73 12·93	1.088 4109 120 7159 152 9823 185 2100	2.652 3831 662 5914 672 6399 682 5316	12°24 12°44 12°64 12°84	4 1 4 1 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2
45 43 47 5	1·197 7637 229 3959 260 9904 292 5472	2·693 5676 703 0884 712 4642 721 6975	13·13 13·33 13·54 13·75	1°217 3992 249 5500 281 6624 313 7365	2.692 2694 701 8562 711 2947 720 5878	13.04 13.24 13.45 13.66	458 434 478 5
5 to	1°324 0665 355 5484 386 9928 418 4000	739 7474 748 5694 757 2594	13.96 14.17 14.38 14.60	1.345 7725 377 7705 409 7304 441 6525	2·729 7384 738 7492 747 6228 756 3622	13.87 14.09 14.30 14.52	5½ 5½ 5½ 5½
5 5 5 5 5 5 5 5 5 5 5 5 5 6	1.449 7700 481 1029 512 3988 543 6578	2·765 8204 774 2545 782 5643 790 7524	14.82 15.04 15.27 15.60	1.473 5368 505 3833 537 1922 568 9636	2·764 9700 773 4486 781 8009 790 0293	14.74 14.97 15.19	5 ⁵ / ₈ 5 ⁷ / ₈ 6
61 61 63 63 7	1.606 0653 668 3261 730 4409 792 4104	2·806 7732 822 3358 837 4586 852 1596	16.06 16.53 17.01 17.49	1.632 3942 695 6757 758 8088 821 7942	2·806 1248 821 7548 836 9384 851 6941	15·99 16·47 16·94 17·43	6 ¹ / ₄ 6 ¹ / ₄ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ² / ₄ 8	1.854 2354 915 9163 977 4540 2.038 8491	2·866 4559 880 3642 893 9003 907 0796	17.97 18.47 18.97 19.47	1.884 6327 947 3248 2.009 8713 072 2728	2·866 0396 879 9921 893 5679 906 7827	17.92 18.42 18.92 19.43	7 ¹ / ₂ 7 ¹ / ₄ 8
81 81 83 83 9	2·100 1022 161 2140 222 1852 283 0164	2·919 9166 932 4255 944 6197 956 5119	19.99 20.50 21.02 21.55	2·134 5301 196 6438 258 6145 320 4429	2·919 6518 932 1892 944 4089 956 3240	19.94 20.46 20.98 21.51	81 81 83 83 9
91 91 93 10	2·343 7082 404 2613 464 6763 524 9538	2·968 1144 979 4391 990 4969 1·001 2986	22.08 22.61 23.14	2°382 1296 443 6754 505 0808 566 3465	2·967 9471 979 2900 990 3641 1·001 1804	22°04 22°58 23°11	9½ 9½ 9¾ 10

	63 3	Years		6	34 Year	rs.	
1001	$\log (1+i)^{63}$	$\log \frac{1}{\bar{a}_{63}}$	Factor	$\log \left(1+\boldsymbol{i}\right)^{64}$	$\log \frac{1}{a_{64}}$	Factor	100%
12	0·136 4619 272 2465	331 8573	7·85 8·16	0·138 6280 276 5679	$2 \cdot 262 \ 3752 \ 326 \ 9527$	7·74 8·05	1
1 ₈ 1 ₄ 1 ₈ 1 ₈ 1 ₁ 1 ₂	0·306 0877 339 8870 373 6446 407 3607	2·347 1831 362 2759 377 1379 391 7713	8·28 8·41 8·54 8·68	0°310 9462 345 2820 379 5755 413 8267	2·342 4877 357 7830 372 8405 387 6627	8·17 8·30 8·43 8·57	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2	0.441 0352 474 6683 508 2602 541 8108	2·406 1781 420 3610 434 3222 448 0642	8.81 8.95 9.10 9.24	0.448 0358 482 2027 516 3278 550 4110	2·402 2520 416 6107 430 7413 444 6466	8·71 8·85 8·99 9·14	$1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2$
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.575 3204 608 7890 642 2166 675 6035	2·461 5898 474 9013 488 0016 500 8934	9°39 9°54 9°70 9°85	0.584 4524 618 4523 652 4105 686 3274	2.458 3292 471 7918 485 0375 498 0690	9·28 9·44 9·59 9·75	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
2 ⁵ / ₈ 2 ³ / ₄ 2 ⁷ / ₈ 3	0.708 9497 742 2553 775 5204 808 7452	2·513 5798 526 0634 538 3472 550 4341	10.01 10.18 10.24 10.21	0.720 2029 754 0372 787 8303 821 5824	2·510 8894 523 5017 535 9089 548 1142	9°91 10°07 10°24 10°41	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
314 314 318 312	0.841 9296 875 0738 908 1779 941 2420	574 0293 585 5437 596 8733	10.68 10.86 11.03 11.21	0.855 2935 888 9639 922 5934 956 1824	2·560 1206 571 9313 583 5497 594 9787	10.58 10.76 10.94 11.12	318 314 38 312 312
35 33 37 4	0.974 2662 1.007 2506 040 1953 073 1004	2.608 0213 618 9906 629 7843 640 4056	11.40 11.58 11.77 11.96	0.989 7308 1.023 2387 056 7064 090 1337	2.606 2217 617 2818 628 1623 638 8664	11·30 11·49 11·68 11·87	35 33 37 4
41 41 43 41 42	1.105 9659 138 7920 171 5788 204 3263	2.650 8575 661 1432 671 2654 681 2274	12·15 12·35 12·55	1.123 5209 156 8681 190 1753 223 4426	2.649 3974 659 7584 669 9525 679 9831	12.06 12.26 12.46 12.66	41 41 43 41 41 41
458 434 478 5	1.237 0347 269 7040 302 3343 334 9258	2.691 0324 700 6830 710 1825 719 5337	12.95 13.16 13.37 13.58	1.256 6701 289 8580 323 0063 356 1151	2.689 8532 699 5660 709 1246 718 5320	12.87 13.08 13.29 13.50	45 43 47 8 5
51 51 53 51 51 51	1°367 4786 399 9926 432 4680 464 9050	2·728 7394 737 8028 746 7265 755 5134	13.79 14.01 14.23 14.45	1·389 1846 422 2147 455 2056 488 1574	2·727 7913 736 9055 745 8775 754 7104	13·71 13·93 14·15 14·37	5½ 5½ 5½ 5½
558 534 578 6	1.497 3035 529 6637 561 9857 594 2695	2·764 1663 772 6880 781 0810 789 3482	14.67 14.89 15.12 15.46	1.521 0702 553 9441 586 7791 619 5754	2.763 4069 771 9699 780 4022 788 7067	14.60 14.82 15.05 15.40	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
61 62 63 7	1.658 7231 723 0253 787 1767 851 1780	2.805 5155 821 2100 836 4516 851 2595	15.93 16.40 16.88 17.37	1.685 0521 750 3749 815 5446 880 5618	2·804 9427 820 6990 835 9962 850 8537	15.87 16.34 16.83 17.32	61 61 63 7
$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8	1.915 0300 978 7333 2.042 2886 105 6966	2·865 6519 879 6463 893 2597 906 5081	17.86 18.36 18.87 19.38	1.945 4273 2.010 1417 074 7058 139 1204	2 ·865 2906 879 3248 892 9738 906 2541	17.81 18.32 18.82 19.34	7¼ 7½ 7¾ 8
81 81 82 83 9	2·168 9580 232 0735 295 0437 357 8694	2·919 4072 931 9715 944 2153 956 1518	19°90 20°42 20°94 21°47	2·203 3859 267 5032 331 4730 395 2959	2.919 1814 931 7710 944 0372 955 9938	19.86 20.38 20.91 21.44	81 81 82 83 9
$\begin{array}{c} 9\frac{1}{4} \\ 9\frac{1}{2} \\ 9\frac{3}{4} \\ 10 \end{array}$	2·420 5511 483 0895 545 4853 607 7392	2.967 7939 979 1538 990 2432 1.001 0730	22°01 22°54 23°08	2*458 9725 522 5036 585 8898 649 1319	2.967 6538 979 0296 990 1330 1.000 9753	21.98 22.52 23.06	9½ 9½ 9¾ 10

	65 Y	ears	1		66 Year	66 Years				
100 <i>i</i>	$\log (1+i)^{65}$	$\log \frac{1}{a_{65}}$	Factor	$\log (1 + \mathbf{i})^{66}$	$\log \frac{1}{a_{66}}$	Factor	100 <i>i</i>			
1 2	0°140 7940 280 8893	2·256 6670 322 1504	7·64 7·94	0.142 9601 285 2107	2·251 0605 317 4474	7·53 7·84	1			
1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½	0°315 8047 350 6771 385 5064 420 2927	2·337 8939 353 3906 368 6428 383 6527	8.07 8.20 8.33 8.46	0·320 6633 356 0721 391 4372 426 7588	2·333 3985 349 0958 364 5414 379 7378	7·96 8·09 8·23 8·36	1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½			
158 134 178 2	0°455 0363 489 7372 524 3954 559 0112	2·398 4230 412 9562 427 2547 441 3218	8.60 8.74 8.89 9.03	0.462 0369 497 2716 532 4630 567 6113	2·394 6879 409 3942 423 8595 438 0868	8·50 8·64 8·79 8·93	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2			
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.593 5845 628 1156 662 6045 697 0513	2.455 1600 468 7722 482 1616 495 3310	9·18 9·34 9·65	0.602 7166 637 7789 672 7984 707 7751	2·452 0790 465 8392 479 3706 492 6763	9.08 9.39 9.55	2½ 2¼ 2¾ 2½ 2½			
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.731 4561 765 8190 800 1401 834 4196	2.508 2838 521 0230 533 5518 545 8736	9.81 9.98 10.14 10.32	0.742 7092 777 6008 812 4500 847 2568	2·505 7597 518 6241 531 2728 543 7093	9.72 9.88 10.05 10.22	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3			
3½ 3¼ 3½ 3½	0.868 6575 902 8539 937 0090 971 1227	2·557 9915 569 9090 581 6294 593 1560	10.49 10.67 10.84 11.03	0.882 0215 916 7440 951 4245 986 0631	2·555 9369 567 9593 579 7798 591 4020	10.40 10.57 10.76 10.94	31/4 31/4 33/8 31/2			
35 33 37 8 4	1.005 1953 039 2269 073 2174 107 1671	2.604 4921 615 6411 626 6065 637 3916	11.40 11.59 11.78	1.020 6599 055 2150 089 7284 124 2004	2.602 8294 614 0656 625 1140 635 9782	11·12 11·31 11·51 11·70	358 324 378 4			
414 423 412	1.141 0759 174 9441 208 7718 242 5589	2.647 9998 658 4343 668 6985 678 7957	11.98 12.18 12.38 12.58	1.158 6310 193 0202 227 3682 261 6752	2.646 6616 657 1679 667 5003 677 6624	12.20 12.10 12.20	41 41 43 41 42			
45 43 47 8 5	1.276 3056 310 0121 343 6783 377 3044	2.688 7292 698 5024 708 1183 717 5802	12.79 13.00 13.21 13.42	1.295 9411 330 1661 364 3503 398 4937	2.687 6577 697 4894 707 1610 716 6758	12.71 12.92 13.14 13.35	45 43 47 5			
5½ 5¼ 5¾ 5½	1.410 8906 444 4368 477 9432 511 4099	736 8912 736 0547 745 0734 753 9506	13.64 13.86 14.08 14.30	1.432 5966 466 6589 500 6808 534 6623	735 2479 744 3117 753 2316	13·57 13·79 14·01 14·24	5½ 5½ 5½ 5½			
5 ⁵ / ₈ 5 ⁷ / ₈ 6	1.544 8369 578 2244 611 5725 644 8812	7762 6891 771 2919 779 7621 788 1023	14.53 14.76 14.99 15.34	1.568 6037 602 5048 636 3659 670 1871	7762 0106 770 6518 779 1582 787 5329	14.47 14.69 14.93 15.28	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
6½ 6½ 6¾ 7	1.711 3810 777 7245 843 9124 909 9456	2·804 4043 820 2199 835 5700 850 4748	15.81 16.29 16.77 17.27	1.737 7100 805 0741 872 2803 939 3293	2.803 8982 819 7704 835 1710 850 1211	15.75 16.23 16.72 17.22	61 61 62 7			
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	1.975 8246 2.041 5502 107 1231 172 5441	2·864 9540 879 0260 892 7086 906 0189	17.77 18.27 18.78 19.30	2.006 2219 072 9586 139 5404 205 9679	2·864 6404 878 7482 892 4627 905 8013	17.72 18.23 18.74 19.26	7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8			
814 812 834 9	2·237 8138 302 9330 367 9023 432 7224	2·918 9730 931 5863 943 8736 955 8489	19.82 20.35 20.88 21.41	2°272 2417 338 3627 404 3315 470 1489	2·918 7805 931 4161 943 7232 955 7161	19.79 20.31 20.85 21.38	81 81 82 83 9			
91 91 93 10	2·497 3940 561 9177 626 2944 690 5245	2·967 5256 978 9161 990 0327 1·000 8865	21.95 22.49 23.03	2·535 8154 601 3319 666 6989 731 9172	2·967 4082 978 8125 989 9412 1·000 8059	21.92 22.46 23.01	9 ¹ / ₂ 9 ¹ / ₂ 9 ³ / ₄ 10			

	67 Y	Tears		68 Years			
100/	$\log (1+i)^{67}$	$\log \frac{1}{a_{67}}$	Factor	$\log (1+i)^{68}$	$\log \frac{1}{a_{68}}$	Factor	100/
12	0°145 1261 289 5320	2·245 5530 312 8406	7·43 7·74	0°147 2922 293 8534	2·240 1412 308 3270	7·33 7·64	${f 1}^{rac{1}{2}}$
1	0·325 5218 361 4671 397 3681 433 2248	2·328 9985 344 8952 360 5304 375 9150	7.86 7.99 8.13 8.26	0°330 3804 366 8622 403 2990 439 6909	2·324 6908 340 7859 356 6152 372 1813	7.77 7.90 8.03 8.17	1½ 1¼ 1¾ 1½
$ \begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array} $	0.469 0374 504 8060 540 5307 576 2115	2·391 0437 405 9218 420 5523 434 9385	8·40 8·54 8·69 8·84	0.476 0380 512 3404 548 5983 584 8117	2·387 4873 402 5358 417 3303 431 8738	8·31 8·45 8·59 8·74	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.611 8487 647 4422 682 9923 718 4990	2·449 0833 462 9899 476 6616 490 1020	8·99 9·14 9·30 9·46	0.620 9807 657 1055 693 1862 729 2228	2·446 1696 460 2211 474 0317 487 6050	8·90 9·05 9·21 9·37	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.753 9624 789 3826 824 7598 860 0941	2·503 3143 516 3021 529 0689 541 6183	9.62 9.79 9.96 10.13	0.765 2156 801 1645 837 0697 872 9313	2. 500 9445 514 0541 526 9372 539 5978	9°53 9°70 9°87 10°05	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3¼ 3½ 3½	0.895 3854 930 6340 965 8400 1.001 0034	2·553 9539 566 0792 577 9981 589 7142	10·31 10·49 10·67 10·85	0.908 7494 944 5241 980 2555 1.015 9438	2·552 0395 564 2661 576 2815 588 0895	10·22 10·40 10·59 10·77	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
358 334 378 4	1.036 1244 071 2031 106 2395 141 2337	2.601 2311 612 5526 623 6820 634 6235	11.04 11.23 11.42 11.62	1.051 5890 087 1912 122 7505 158 2671	2·599 6941 611 0989 622 3079 633 3248	10.96 11.15 11.54	35 334 378 4
41 41 43 41 41 41	1.176 1860 211 0963 245 9647 280 7915	2.645 3804 655 9566 666 3555 676 5807	11.82 12.02 12.22 12.43	1°193 7410 229 1723 264 5612 299 9077	2.644 1535 654 7978 665 2614 675 5480	11.74 11.95 12.15 12.36	4½ 4¼ 4¾ 4½
458 434 478 5	1.315 5766 350 3201 385 0222 419 6830	2.686 6358 696 5244 706 2500 715 8160	12.64 12.85 13.07 13.28	1·335 2120 370 4741 405 6942 440 8723	2.685 6615 695 6054 705 3833 714 9988	12·57 12·78 13·00 13·22	4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5
51 51 51 53 51 51	1.454 3026 488 8810 523 4184 557 9148	734 4827 743 5901 752 5512	13.50 13.73 13.95 14.18	1.476 0086 511 1031 546 1560 581 1673	733 7569 742 9063 751 9072	13.44 13.66 13.89 14.12	51 51 53 52
558 534 578 6	1·592 3704 626 7852 661 1594 695 4930	770 0474 778 5888 786 9965	14·40 14·63 14·87 15·22	1.616 1371 651 0656 685 9528 720 7988	2.760 7629 769 4766 778 0515 786 4909	14·35 14·58 14·81 15·17	5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6
$\begin{array}{c} 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7 \end{array}$	1.764 0389 832 4237 900 6482 968 7131	2.803 4225 819 3488 834 7977 849 7907	15.70 16.18 16.67 17.17	1.790 3678 859 7733 929 0161 998 0969	2.802 9751 818 9533 834 4482 849 4821	15.65 16.13 16.63 17.13	6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7
7¼ 7½ 7¾ 8	2.036 6192 104 3671 171 9577 239 3916	2·864 3482 878 4899 892 2346 905 5998	17.68 18.19 18.71 19.23	2.067 0165 135 7756 204 3750 272 8154	2·864 0760 878 2499 892 0229 905 4134	17.64 18.15 18.67 19.19	7½ 7½ 7¾ 8
81 81 83 9	2·306 6696 373 7925 440 7608 507 5754	2·918 6027 931 2593 943 5850 955 5943	19.75 20.28 20.82 21.36	2°341 0975 409 2222 477 1901 545 0019	2.918 4386 931 1148 943 4579 955 4824	19.72 20.25 20.79 21.33	81 81 83 84 9
91 91 93 10	2·574 2369 640 7460 707 1034 773 3099	2·967 3009 978 7180 989 8579 1·000 7326	21·90 22·44 22·99	2.612 6583 680 1601 747 5080 814 7026	2·967 2026 978 6316 989 7820 1·000 6659	21.87 22.42 22.97	9¼ 9½ 9¾ 10

	69 7	Tears	1		O Year		20 01
100 <i>i</i>	$\log (1+i)^{69}$	$\log \frac{1}{a_{69}}$	Factor	70	$\log \frac{1}{a_{70}}$	Factor	100 <i>i</i>
1 1 2	0°149 4583 298 1748	2·234 8225 303 9041	7·24 7·54	0·151 6243 302 4962	2·229 5942 299 5687	7.15	1 2
$\begin{array}{ c c c }\hline 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{5}} \\ 1_{\frac{1}{2}} \\ \end{array}$	0·335 2389 372 2572 409 2298 446 1569	2·320 4726 336 7652 352 7847 368 5340	7.67 7.80 7.94 8.07	0·340 0974 377 6522 415 1607 452 6230	2·316 3412 332 8303 349 0390 364 9701	7·58 7·71 7·85 7·98	11/4 11/4 13/8 11/2
$\begin{array}{ c c }\hline 1_{\frac{5}{8}} \\ 1_{\frac{3}{4}} \\ 1_{\frac{7}{8}} \\ 2 \\ \end{array}$	0.483 0385 519 8748 556 6659 593 4119	2·384 0159 399 2337 414 1908 428 8901	8·21 8·36 8·50 8·65	0*490 0391 527 4093 564 7335 602 0120	2·380 6269 396 0125 411 1308 425 9847	8·12 8·27 8·42 8·57	$\begin{array}{c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.630 1128 666 7689 703 3801 739 9467	2·443 3355 457 5302 471 4780 485 1827	8.81 8.96 9.12 9.28	0.639 2449 676 4322 713 5740 750 6706	2·440 5781 454 9146 468 9981 482 8324	8·72 8·88 9·04 9·20	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$\begin{array}{ c c c }\hline 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \\ \end{array}$	0.776 4687 812 9463 849 3795 885 7685	2·498 6478 511 8774 524 8751 537 6451	9.45 9.62 9.79 9.96	0.787 7219 824 7281 861 6894 898 6057	2·496 4215 509 7693 522 8800 535 7576	9·36 9·53 9·71 9·88	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3\frac{1}{3}\frac{1}{4}\frac{3}{3}\frac{3}{2}\frac{1}{2}	0.922 1134 958 4142 994 6711 1.030 8841	2.550 1912 562 5172 574 6275 586 5257	10·14 10·32 10·51 10·69	0.935 4773 972 3042 1.009 0866 045 8245	2·548 4062 560 8301 573 0332 585 0201	10.06 10.24 10.43 10.62	31/8 31/4 33/8 31/2
35 33 37 4 4	1.067 0535 103 1793 139 2615 175 3004	2·598 2161 609 7026 620 9891 632 0797	10.88 11.08 11.27 11.47	1.082 5181 119 1674 155 7726 192 3338	2·596 7946 608 3609 619 7233 630 8859	10.81 11.00 11.40	35 33 37 4
4½ 4¼ 4½ 4½	1.211 2960 247 2484 283 1577 319 0240	2.642 9784 653 6892 664 2158 674 5622	11.67 11.87 12.08 12.29	1.228 8510 265 3245 301 7542 338 1403	\$\bar{2}\cdot 641 8529 652 6284 663 2163 673 6209	11.60 11.81 12.01	4½ 4¼ 4¾ 4½ 4½
458 434 478 5	1·354 8475 390 6282 426 3662 462 0616	2.684 7323 694 7297 704 5584 714 2221	12·50 12·72 12·94 13·16	1.374 4830 410 7822 447 0382 483 2509	2.683 8459 693 8954 703 7733 713 4834	12.44 12.65 12.87 13.09	458 434 478 5
5½ 5¼ 5½ 5½ 5½	1.497 7146 533 3252 568 8935 604 4197	733 7241 733 0685 742 2586 751 2977	13·38 13·60 13·83 14·06	1.519 4206 555 5473 591 6311 627 6722	732 4153 741 6446 750 7208	13·32 13·54 13·77 14·00	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
55 534 578 6	1.639 9038 675 3459 710 7462 746 1047	2·760 1897 768 9375 777 5448 786 0146	14·29 14·52 14·76 15·11	1.663 6705 699 6263 735 5396 771 4106	768 4284 777 0667 785 5656	14·24 14·47 14·71 15·07	5\frac{5}{8} 5\frac{3}{4} 5\frac{7}{8} 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	1.816 6968 887 1229 957 3840 2.027 4807	2·802 5545 818 5822 834 1211 849 1939	15.60 16.59 16.59	1.843 0257 914 4725 985 7519 2.056 8644	2·802 1591 818 2341 833 8149 848 9248	15.55 16.05 16.55 17.05	6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2.097 4138 167 1840 236 7922 306 2391	2·863 8222 878 0266 891 8266 905 2408	17.60 18.12 18.64 19.16	2·127 8111 198 5925 269 2095 339 6629	2·863 5859 877 8191 891 6445 905 0812	17·56 18·08 18·61 19·13	7½ 7½ 7¾ 8
81/4 81/2 83/4 9	2·375 5254 444 6519 513 6193 582 4284	2·918 2870 930 9818 943 3411 955 3799	19.69 20.23 20.77 21.31	2*409 9534 480 0817 550 0486 619 8549	2·918 1470 930 8591 943 2337 955 2859	19.67 20.20 20.74 21.29	81 81 82 83 9
91 91 91 93 10	2.651 0797 719 5742 787 9125 856 0953	2·967 1127 978 5527 989 7129 1·000 6053	21·85 22·40 22·95	2.689 5012 758 9883 828 3170 897 4880	2.967 0304 978 4807 989 6500 1.000 5503	21·83 22·38 22·94	91 91 93 93 10

	71 3	Years		1 -	72 Year	rs	
100 <i>i</i>	$\log (1+i)^{71}$	$\log \frac{1}{a_{71}}$	Factor	$\log (1+I)^{72}$	$\log \frac{1}{a_{72}}$	Factor	100 <i>i</i>
1 2	0°153 7904 306 8175	2·224 4535 295 3185	7·06 7·36	0·155 9564 311 1389	2·219 3982 291 1510	6·97 7·28	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0·344 9560 383 0473 421 0916 459 0890	2·312 2941 328 9788 345 3755 361 4874	7·49 7·62 7·76 7·90	0·349 8145 388 4423 427 0224 465 5550	2·308 3288 325 2080 341 7917 358 0832	7.41 7.54 7.67 7.81	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
15/8 13/4 17/8 2	0°497 0397 534 9437 572 8011 610 6122	2·377 3179 392 8702 408 1480 423 1550	8.04 8.18 8.33 8.48	0.504 0402 542 4781 580 8688 619 2124	2·374 0861 389 8037 405 2400 420 3986	7.95 8.10 8.25 8.40	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.648 3769 686 0955 723 7680 761 3944	2·437 8950 452 3716 466 5892 480 5517	8.63 8.79 8.95 9.12	0.657 5090 695 7588 733 9619 772 1183	2·435 2836 449 8991 464 2491 478 3380	8·55 8·71 8·87 9·04	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25/8 23/4 27/8 3	0.798 9751 836 5100 873 9992 911 4430	2·494 2629 507 7275 520 9494 533 9329	9·28 9·45 9·63 9·80	0.810 2282 848 2918 886 3091 924 2802	2·492 1700 505 7495 519 0809 532 1686	9·21 9·38 9·55 9·73	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3¼ 3½ 3½ 3½	0.948 8413 986 1943 1.023 5021 060 7648	2·546 6824 559 2023 571 4967 583 5702	9.98 10.17 10.35 10.54	0.962 2052 1.000 0843 037 9176 075 7052	2.545 0174 557 6315 570 0156 582 1740	9.91 10.09 10.28 10.47	31 31 32 32 32
35 33 37 4	1.097 9826 135 1555 172 2836 209 3671	2·595 4271 607 0715 618 5082 629 7411	10.43 10.93 11.13 11.3	1.113 4471 151 1436 188 7946 226 4004	2·594 1116 605 8325 617 3417 628 6432	10.66 10.86 11.06 11.26	358 334 378 4
41 41 43 41 42	1.246 4060 283 4005 320 3507 357 2566	2.640 7748 651 6133 662 2611 672 7220	11.53 11.74 11.95 12.16	1.263 9610 301 4766 338 9472 376 3729	2.639 7418 650 6418 661 3477 671 8636	11.47 11.68 11.89 12.10	41/4 41/4 43/8 41/2
45 43 47 47 5	1·394 1184 430 9362 467 7101 504 4402	2.683 0005 693 1005 703 0261 712 7811	12·38 12·59 12·81 13·04	1.413 7539 451 0903 488 3821 525 6295	2.682 1939 692 3429 702 3147 712 1134	12·32 12·54 12·76 12·98	45 43 47 8 5
51 51 52 51 51	1.541 1266 577 7694 614 3687 650 9246	2.722 3698 731 7958 741 0627 750 1747	13·26 13·49 13·72 13·95	1.562 8326 599 9915 637 1063 674 1771	2·721 7432 731 2078 740 5113 749 6576	13·21 13·44 13·67 13·90	51 51 51 51 51
558 534 578 6	1.687 4373 723 9067 760 3331 796 7164	2·759 1351 767 9475 776 6155 785 1426	14·18 14·42 14·66 15·02	748 1871 785 1265 822 0223	2·758 6503 767 4932 776 1898 784 7438	14·14 14·37 14·61 14·98	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
61 61 62 63 7	1.869 3546 941 8222 2.014 1197 086 2482	2·801 7872 817 9075 833 5283 848 6734	15.51 16.00 16.51 17.02	1.895 6836 969 1718 2.042 4876 115 6320	2.801 4375 817 6010 833 2599 848 4387	15·47 15·97 16·47 16·98	61 61 63 7
7½ 7½ 7¾ 8	2°158 2084 230 0010 301 6268 373 0866	2·863 3655 877 6262 891 4756 904 9334	17.53 18.05 18.58	2·188 6057 261 4094 334 0441 406 5104	2·863 1602 877 4467 891 3189 904 7966	17.50 18.02 18.55 19.08	7½ 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	2*444 3813 515 5114 586 4779 657 2814	2·918 0177 930 7461 943 1349 955 1996	19.64 20.18 20.72 21.27	2.478 8092 550 9412 622 9071 694 7078	2·917 8984 930 6420 943 0441 955 1206	19.62 20.16 20.70 21.25	81 81 83 83 9
9½ 9½ 9¾ 10	2°727 9226 798 4025 868 7216 938 8806	2·966 9550 978 4150 989 5926 1·000 5003	21.82 22.37 22.92	2.766 3441 837 8166 909 1261 980 2733	2.966 8862 978 3550 989 5403 1.000 4547	21.80 22.35 22.91	91 91 93 10

	72 7	Years		74 Years			
		1 3			9	1	1
1001	$\log (1+i)^{73}$	$\log \frac{1}{\hat{a}_{73}}$	Factor	$\log (1+i)^{74}$	$\log \frac{1}{s_{74}}$	Factor	100%
1 1 2	0°158 1225 315 4603	2·214 4258 287 0638	6·88 7·19	0·160 2886 319 7817	2·209 5339 283 0545	6·80 7·11	122
1½ 1¼ 1¾ 1½ 1½	0°354 6730 393 8373 432 9533 472 0211	2·304 4428 321 5156 338 2852 354 7553	7·32 7·45 7·59 7·73	0·359 5316 399 2324 438 8842 478 4871	2·300 6340 317 8994 334 8538 351 5012	7·24 7·37 7·51 7·65	1 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
$\begin{array}{c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0.511 0408 550 0125 588 9364 627 8125	2·370 9293 386 8108 402 4042 417 7131	7.87 8.02 8.17 8.32	0.518 0413 557 5469 597 0040 636 4127	2·367 8451 383 8895 399 6385 415 0963	7·79 7·94 8·09 8·24	15 13 17 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.666 6411 705 4221 744 1558 782 8422	2·432 7417 447 4944 461 9753 476 1891	8·47 8·63 8·79 8·96	0.675 7731 715 0854 754 3497 793 5660	2·430 2670 445 1554 459 7659 474 1029	8·40 8·56 8·72 8·89	2½ 2½ 2½ 2½ 2½
$\begin{array}{c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	0.821 4814 860 0736 898 6189 937 1174	2·490 1401 503 8330 517 2723 530 4627	9°13 9°30 9°48 9°66	0·832 7346 871 8555 910 9288 949 9546	2·488 1713 501 9759 515 5214 528 8127	9.05 9.23 9.40 9.58	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}	0°975 5692 1°013 9744 052 3331 090 6455	2·543 4089 556 1156 568 5874 580 8292	9.84 10.02 10.21 10.40	0.988 9332 1.027 8645 066 7487 105 5859	2·541 8547 554 6523 567 2104 579 5339	9.77 9.95 10.14 10.34	31/8 31/4 33/8 31/2
358 334 378 4	1.128 9117 167 1317 205 3057 243 4338	2·592 8457 604 6416 616 2215 627 5901	10.60 10.79 11.00 11.20	1.144 3762 183 1198 221 8167 260 4671	2·591 6277 603 4967 615 1459 626 5799	10.53 10.73 10.93 11.14	35 33 37 4
41 41 43 41 42	1.281 5161 319 5526 357 5437 395 4892	2.638 7520 649 7121 660 4744 671 0437	11.41 11.61 11.83 12.04	1.299 0711 337 6287 376 1401 414 6055	2.637 8036 648 8220 659 6394 670 2606	11·34 11·56 11·77 11·99	41/4 41/4 43/8 41/2
45 43 47 5	1.433 3894 471 2443 509 0541 546 8188	2.681 4244 691 6210 701 6375 711 4785	12·26 12·48 12·70 12·93	1.453 0249 491 3983 529 7261 568 0081	2.680 6903 690 9328 700 9929 710 8746	12·20 12·43 12·65 12·88	45 43 47 5
51/8 51/4 52/8 51/2	1.584 5386 622 2136 659 8439 697 4296	730 6500 739 9887 749 1681	13·15 13·39 13·62 13·85	1.606 2447 644 4357 682 5 815 720 6820	2·720 5825 730 1207 739 4934 748 7046	13·11 13·34 13·57 13·81	51 51 53 51 51
55 53 57 57 6	1.734 9707 772 4674 809 9199 847 3282	767 0641 775 7881 784 3680	14.09 14.33 14.57 14.93	1.758 7374 796 7478 834 7133 872 6340	757 7584 766 6586 775 4091 784 0137	14.04 14.28 14.53 14.89	5\frac{5}{8}\$ 5\frac{3}{8}\$ 5\frac{7}{8}\$ 6
61 61 63 63 7	1.922 0125 996 5214 2.070 8555 145 0158	2.801 1086 817 3135 833 0087 848 2193	15·43 15·93 16·44 16·95	1.948 3415 2.023 8710 099 2234 174 3995	2·800 7993 817 0436 832 7736 848 0144	15·39 15·89 16·40 16·92	6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2.219 0030 292 8179 366 4614 439 9342	2·862 9689 877 2798 891 1735 904 6699	17·47 17·99 18·52 19·06	2·249 4003 324 2264 398 8786 473 3579	2. 862 7905 877 1247 891 0386 904 5527	17.44 17.97 18.50 19.04	7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8
81 81 82 83 9	2.513 2371 586 3709 659 3364 732 1343	2·917 7881 930 5461 942 9607 955 0480	19.60 20.14 20.68 21.23	2.547 6650 621 8006 695 7 657 769 5 608	2·917 6862 93° 4577 942 8839 954 9814	19 .5 7 20 .1 2 20 .6 7 21 .2 2	81 81 83 84 9
91 91 93 10	2.804 7655 877 2307 949 5306 3.021 6660	2.966 8231 978 3001 989 4927 1.000 4134	21.78 22.34 22.89	2.843 1870 916 6448 989 9351 3.063 0587	2.966 7654 978 2501 989 4493 1.000 3757	21.77 22.32 22.88	91 91 93 10

COMP		Zears	ANNUI	76 Years				
100 <i>i</i>	$\log (1+i)^{75}$	$\log \frac{1}{a_{75}}$	Factor	78	$\frac{1}{1}\log\frac{1}{a_{76}}$	Factor	100 <i>i</i>	
1 1	0·162 4546 324 1030	2·204 7205 279 1212	6.72	0·164 6207 328 4244	2·199 9833 275 2616	6.64	1 1 2	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0°364 3901 404 6274 444 8150 484 9532	2·296 9002 314 3571 331 4953 348 3189	7·16 7·29 7·43 7·57	0·369 2486 410 0224 450 7459 491 4192	2·293 2392 310 8866 328 2077 345 2062	7.08 7.22 7.35 7.49	1 to	
158 134 178 2	0°525 0419 565 0813 605 0716 645 0129	381 0374 396 9407 412 5459	7.71 7.86 8.01 8.16	0·532 0425 572 6158 613 1392 653 6131	2·361 8864 378 2525 394 3088 410 0601	7·64 7·79 7·94 8·09	15 13 17 17 2	
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.684 9052 724 7488 764 5436 804 2899	2·427 8575 442 8800 457 6183 472 0772	8·32 8·48 8·65 8·81	0.694 0373 734 4121 774 7375 815 0138	2·425 5109 440 6662 455 5308 470 1099	8·25 8·41 8·57 8·74	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	
258 234 278 3	0.843 9878 883 6373 923 2386 962 7919	2·486 2614 500 1761 513 8263 527 2168	8.98 9.16 9.33 9.52	0.855 2409 895 4191 935 5485 975 6291	2·484 4084 498 4316 512 1847 525 6730	8·91 9·09 9·27 9·45	25 23 27 28 3	
3½ 3¼ 3½ 3½ 3½	1.002 2971 041 7545 081 1642 120 5262	2·540 3530 553 2398 565 8825 578 2860	9.70 9.89 10.08 10.27	055 6446 095 5797 13 5 4666	2·538 90 1 7 551 8762 564 6018 577 0838	9.63 9.82 10.01 10.51	31/4 31/4 33/8 31/2	
358 344 378 4	1.159 8408 199 1079 238 3278 277 5004	2·590 4557 602 3962 614 1130 625 6108	10·47 10·67 11·87 11·08	1·175 3053 215 0960 254 8388 294 5338	2·589 3274 601 3380 613 1208 624 6809	10.41 10.61 10.81 11.02	3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4	
4½ 4½ 4¾ 4½ 4½	1·316 6261 355 7048 394 7366 433 7218	2.636 8947 647 9699 658 8409 669 5125	11·29 11·50 11·71 11·93	1·334 1811 373 7808 413 3331 452 8381	2.636 0238 647 1540 658 0772 668 7978	11·23 11·44 11·66 11·88	41 41 43 41 41	
45 43 47 8 5	1.472 6603 511 5524 550 3980 589 1974	2.679 9895 690 2769 700 3790 710 3003	12·15 12·37 12·60 12·83	1.492 2958 531 7064 571 0700 610 3867	2.679 3211 689 6517 699 7944 709 7540	12·10 12·32 12·55 12·78	45 43 47 47 5	
5½ 5¼ 5¾ 5½ 5½	1.627 9507 666 6578 705 3191 743 9345	2·720 0453 729 6184 739 0238 748 2657	13.06 13.29 13.53 13.76	1.649 6567 688 8799 728 0567 767 1869	2·719 5349 729 1416 738 5787 747 8502	13.01 13.25 13.48 13.72	5½ 5¼ 5½ 5½	
558 534 578 6	1.782 5041 821 0282 859 5067 897 9399	2·757 3484 766 2757 775 0515 783 6797	14.00 14.24 14.49 14.86	1.806 2709 845 3086 884 3002 923 2458	2·756 9605 765 9137 774 7140 783 3649	13.96 14.20 14.45 14.82	558 534 578 6	
6 ¹ / ₂ 6 ³ / ₄ 7	1.974 6704 2.051 2206 127 5913 203 7833	2·800 5084 816 7904 832 5533 847 8230	15·35 15·86 16·37 16·89	2.000 9993 078 5702 155 9592 233 1671	2·800 2347 816 5527 832 3470 847 6442	15·32 15·83 16·34 16·86	61 61 63 7	
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2·279 7976 355 6348 431 2959 506 7817	2·862 6243 876 9804 890 9134 904 4441	17.41 17.94 18.48	2·310 1949 387 0433 463 7132 540 2054	2 ·862 4694 876 8462 890 7973 904 3437	17·39 17·92 18·46 18·99	7½ 7½ 7¾ 8	
81 81 82 83 9	2.582 0929 657 2304 732 1949 806 9873	2·917 5923 930 3762 942 8134 954 9204	19.56 20.10 20.65 21.20	2.616 5208 692 6601 768 6242 844 4138	2·917 5054 930 3011 942 7486 954 8644	19·54 20·08 20·63 21·19	81 81 83 83 9	
9½ 9½ 9¾ 10	2.881 6084 956 0589 3.030 3397 104 4514	2·966 7125 978 2044 989 4098	21.75 22.31 22.87	2.920 0299 995 4731 3.070 7442 145 8441	2·966 6642 978 1627 989 3738 1·000 3105	21°74 22°30 22°86 	9½ 9½ 9¾ 10	

	77 Years			78 Years			
1001	$\log (1+i)^{77}$	$\log \frac{1}{a_{77}}$	Factor	log (1+1) ⁷⁸	$\log \frac{1}{\bar{a}_{78}}$	Factor	100/
1	0·166 7868 332 7458	2·195 3205 271 4736	6·57 6·88	0·168 9528 337 0672	2·190 7301 267 7554	6·49 6·80	1 2
1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	0°374 1072 415 4175 456 6768 497 8852	2·289 6489 307 4861 324 9888 342 1613	7.01 7.14 7.28 7.42	0°378 9657 420 8125 462 6076 504 3513	2·286 1276 304 1534 321 8367 339 1821	6.93 7.07 7.21 7.35	14 14 13 12
$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2	0.539 0430 580 1502 621 2069 662 2132	2·359 0078 375 5326 391 7408 407 6367	7·56 7·71 7·86 8·02	0.546 0436 587 6846 629 2745 670 8134	2·356 1936 372 8763 389 2347 405 2739	7·49 7·64 7·79 7·95	15 13 17 17 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.703 1694 744 0754 784 9314 825 7376	2·423 2254 438 5120 453 5014 468 1991	8·18 8·34 8·50 8·67	0.712 3014 753 73 ⁸ 7 795 1254 836 4615	2·420 9991 436 4153 451 5283 466 3431	8·11 8·27 8·44 8·61	2\frac{1}{8} 2\frac{1}{4} 2\frac{3}{8} 2\frac{1}{2}
25 23 27 27 3	0.866 4941 907 2009 947 8583 988 4663	2.482 6104 496 7405 510 5950 524 1794	8.85 9.02 9.38	0.877 7473 918 9828 960 1682 1.001 3035	2·480 8655 495 1010 509 0553 522 7341	8·78 8·96 9·14 9·32	25 23 27 27 8
3½ 3½ 3½ 3½ 3½	1.029 0250 069 5346 109 9952 150 4069	2·537 4991 550 5596 563 3665 575 9253	9.57 9.76 9.95 10.15	1.042 3890 083 4247 124 4108 165 3473	2·536 1432 549 2882 562 1750 574 8089	9.51 9.70 9.89 10.09	31/4 31/4 33/8 31/2
358 334 378 4	1·190 7699 231 0841 271 3498 311 5671	2.588 2415 600 3205 612 1679 623 7889	10·35 10·55 10·76 10·97	1.206 2344 247 0722 287 8609 328 6005	2·587 1961 599 3421 611 2524 622 9326	10·29 10·50 10·70 10·91	35 33 37 4
41 41 43 41 42	1·351 7361 391 8569 431 9296 471 9544	2.635 1888 646 3730 657 3467 668 1151	11.83 11.91 11.18	1°369 2911 409 9330 450 5261 491 0707	2.634 3884 645 6251 656 6481 667 4627	11·12 11·34 11·56 11·78	41 41 43 41 41
45 43 47 8 5	7.511 9313 551 8604 591 7420 631 5760	2.678 6830 689 0556 699 2378 709 2343	12.05 12.28 12.50 12.73	1.531 5667 572 0145 612 4140 652 7653	2.678 0740 688 4874 698 7077 708 7400	12·00 12·23 12·46 12·69	45 43 47 8 5
5½ 5¼ 5½ 5½	1.671 3627 711 1020 750 7942 790 4394	728 6891 728 6891 738 1566 747 4566	12.97 13.20 13.44 13.68	1.693 0687 733 3242 773 5318 813 6918	2·718 5891 728 2597 737 7564 747 0839	12.93 13.16 13.40 13.64	51 51 52 51
55 53 57 6	1.830 0376 869 5890 909 0936 948 5516	2·756 5936 765 5718 774 3953 783 0681	13·92 14·17 14·41 14·78	1.853 8043 893 8693 933 8870 973 8575	2·756 2466 765 2486 774 0945 782 7883	13·89 14·13 14·75	55 53 57 6
61 61 63 63 7	2.027 3283 105 9198 184 3270 262 5509	2·799 9774 816 3298 832 1540 847 4772	15·29 15·80 16·32 16·84	2.053 6572 133 2694 212 6949 291 9347	2·799 7353 816 1205 831 9732 847 3211	15·26 15·77 16·29 16·81	6½ 6½ 6¾ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2·340 5922 418 4518 496 1305 573 6292	2·862 3250 876 7215 890 6896 904 5507	17°37 17°90 18°44 18°98	2·370 9895 449 8602 528 5477 607 0529	2·862 1904 876 6054 890 5896 904 1646	17·34 17·88 18·42 18·96	7½ 7½ 7¾ 8
81 81 83 9	2.650 9487 728 0898 805 0535 881 8403	2·917 4252 930 2319 942 6889 954 8129	19·52 20·07 20·62 21·17	2.685 3766 763 5196 841 4827 919 2668	2·917 3511 930 1682 942 634 1 954 7659	19·51 20·61 20·61 21·16	81 81 82 83 4 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	2.958 4513 3.034 8872 111 1487 187 2368	2·966 6199 978 1246 989 3410 1·000 2823	21·73 22·29 22·85	2.996 8728 3.074 3013 151 5533 228 6294	2·966 5794 978 0898 989 3111 1·000 2566	21·72 22·28 22·84	9½ 9½ 9¾ 10

	79	Years		8	30 Year	s	
100 <i>i</i>	$\log (1 + \boldsymbol{i})^{79}$	$\log \frac{1}{\tilde{a}_{79}}$	Factor	$\log (1+i)^{80}$	$\log \frac{1}{a_{80}}$	Factor	100/
12	0·171 1189 341 3885	2·186 2102 264 1051	6·42 6·73	0·173 2849 345 7099	2·181 7589 260 5210	6·35 6·66	1 2
$\begin{array}{ c c c }\hline 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{8}} \\ 1_{\frac{1}{2}} \\ \end{array}$	0·383 8242 426 2075 468 5385 510 8173	2·282 6733 300 8868 318 7498 336 2668	6.86 7.00 7.14 7.28	0·388 6828 431 6026 474 4694 517 2834	2·279 2842 297 6845 315 7260 333 4134	6·79 6·93 7·07 7·21	1½ 1¼ 1¾ 1½ 1½
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0.553 0441 595 2190 637 3421 679 4136	2·353 4423 370 2814 386 7887 402 9699	7·42 7·57 7·73 7·88	0.560 0447 602 7534 645 4097 688 0137	367 7459 384 4011 400 7229	7·36 7·51 7·66 7·82	$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}$
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.721 4335 763 4020 805 3193 847 1854	2·418 8300 434 3747 449 6094 464 5399	8.04 8.20 8.37 8.54	0.730 5656 773 0653 815 5132 857 9092	2·416 7166 432 3882 447 7433 462 7879	7.98 8.14 8.31 8.48	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.889 0004 930 7646 972 4780 1.014 1408	2·479 1720 493 5112 507 5638 521 3356	8·72 8·90 9·08 9·26	0.900 2536 942 5464 984 7879 1.026 9780	2·477 5280 491 9696 506 1190 519 9821	8.66 8.83 9.02 9.20	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3½ 3½ 3½ 3½	1.055 7530 097 3148 138 8263 180 2876	2·534 8325 548 0603 561 0252 573 7331	9.45 9.64 9.84 10.03	1.069 1169 111 2048 153 2418 195 2280	2·533 5652 546 8746 559 9160 572 6961	9°39 9°58 9°78 9°98	3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}
358 334 378 4	1.221 6989 263 0603 304 3719 345 6338	2.586 1897 598 4011 610 3730 622 1111	10°24 10°44 10°65 10°86	1.237 1635 279 0484 320 8829 362 6671	2·585 2207 597 4960 609 5279 621 3225	10.81 10.80 10.18	$ \begin{array}{c} 3\frac{5}{8} \\ 3\frac{3}{4} \\ 3\frac{7}{8} \\ 4 \end{array} $
4½ 4½ 4½ 4½	1·386 8461 428 0090 469 1226 510 1869	2.633 6211 644 9089 655 9798 666 8393	11.07 11.29 11.73	1.404 4012 446 0851 487 7191 529 3032	2.632 8856 644 2230 655 3405 666 2436	11.03 11.24 11.46 11.69	41 41 43 41 41 41
45 43 47 8 5	1.551 2022 592 1685 633 0859 673 9546	2.677 4928 687 9456 698 2029 708 2698	11.96 12.19 12.42 12.65	1.570 8377 612 3225 653 7579 695 1439	2.676 9379 687 4290 697 7221 707 8224	11.91 12.14 12.38 12.61	45 43 47 5
51/8 51/4 53/8 51/2	1.714 7747 755 5463 796 2694 836 9443	727 8520 737 3770 746 7309	12·89 13·12 13·36 13·61	1.736 4807 777 7684 819 0070 860 1968	2.717 7350 727 4650 737 0173 746 3967	12.85 13.09 13.57	5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1
5 5 5 5 5 5 5 5 5 5 5 5 5 6	1.877 5710 918 1497 958 6804 999 1634	2·755 9183 764 9434 773 8108 782 5245	13.85 14.10 14.35 14.72	1.901 3378 942 4301 983 4739 2.024 4692	2·755 6077 764 6549 773 5429 782 2758	13.82 14.06 14.31 14.69	558 534 578 6
6½ 6½ 6¾ 7	2.079 9862 160 6190 241 0628 321 3184	2·799 5076 815 9241 831 8040 847 1754	15·23 15·74 16·26 16·79	2·106 3151 187 9686 269 4307 350 7022	2·799 2933 815 7397 831 6455 847 0391	15·20 15·72 16·24 16·77	61 61 63 63 7
7½ 7½ 7¾ 8	2.401 3868 481 2687 560 9650 640 4767	2.862 0649 876 4975 890 4969 904 0849	17·32 17·86 18·40 18·94	2.431 7841 512 6771 593 3823 673 9004	2·861 9480 876 3971 890 4108 904 0112	17·30 17·84 18·38 18·93	7½ 7½ 7¾ 8
81 81 83 83 9	2.719 8045 798 9493 877 9120 956 6933	2.917 2826 930 1094 942 5837 954 7226	19.49 20.59 21.15	2.754 2324 834 3791 914 3412 994 1198	2.917 2194 930 0553 942 5374 954 6829	19.48 20.03 20.58 21.14	81 81 82 83 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	3.035 2942 113 7154 191 9578 270 0221	2·966 5423 978 0580 989 2839 1·000 2333	21.71 22.27 22.83 	3.073 7156 153 1295 232 3623 311 4148	2·966 5084 978 0290 989 2590 1·000 2121	21.70 22.26 22.82	9½ 9½ 9¾ 10

27 (401)

	81 Years			82 Years			
100 <i>i</i>	$\log (1+i)^{81}$	$\log \frac{1}{a_{81}}$	Factor	$\log (1+i)^{82}$	$\log \frac{1}{\tilde{a}_{82}}$	Factor	100/
1 1	0.175 4510	2·177 3746 257 0014	6.28	0·177 6171 354 3527	2·173 0556 253 5442	6·21 6·53	1
$\begin{array}{c c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$	0°393 5413 436 9976 480 4002 523 7494	2·275 9587 294 5447 312 7637 330 6205	6.73 6.86 7.00 7.14	0·398 3998 442 3926 486 3311 530 2155	2·272 6950 291 4658 309 8613 327 8865	6.66 6.80 6.93 7.08	1 to
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0.567 0452 610 2878 653 4774 696 6139	2·348 1205 365 2683 382 0702 398 5311	7·29 7·44 7·59 7·75	0.574 0458 617 8223 661 5450 705 2141	2·345 5467 362 8473 379 7941 396 3929	7·23 7·38 7·53 7·69	158 134 178 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.739 6976 782 7287 825 7071 868 6331	2·414 6570 430 4541 445 9281 461 0853	7.91 8.08 8.25 8.42	0.748 8297 792 3920 835 9010 879 3570	2·412 6497 428 5708 444 1624 459 4308	7.85 -8.02 8.19 8.36	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$ \begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array} $	0.911 5068 954 3283 997 0977 1.039 8152	2·475 9321 490 4745 504 7190 518 6720	8.60 8.78 8.96 9.15	0°922 7599 966 1101 1°009 4076 052 6524	2·474 3826 489 0244 503 3625 517 4038	8·54 8·72 8·90 9·09	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
$ \begin{array}{r} 3\frac{1}{8} \\ 3\frac{1}{4} \\ 3\frac{3}{8} \\ 3\frac{1}{2} \end{array} $	1.082 4809 125 0949 167 6573 210 1683	2·532 3399 545 7289 558 8457 571 6965	9·34 9·53 9·73 9·93	1.095 8449 138 9849 182 0729 225 1087	2·531 1550 544 6224 557 8129 570 7329	9·28 9·48 9·67 9·88	3½ 3¼ 3½ 3½ 3½
$3\frac{5}{8}$ $3\frac{3}{4}$ $3\frac{7}{8}$ 4	1.252 6280 295 0365 337 3940 379 7005	2·584 2877 596 6254 608 7160 620 5656	10·13 10·34 10·55 10·76	1·268 0926 311 0246 353 9050 396 7338	2·583 3891 595 7879 607 9358 619 8391	10.08 10.29 10.50 10.72	35 34 37 4
4½ 4¼ 4½ 4½ 4½	1.421 9562 464 1612 506 3156 548 4195	2.632 1803 643 5661 654 7289 665 6743	10.98 11.20 11.42 11.65	1.439 5112 482 2372 524 9121 567 5358	2.631 5040 642 9368 654 1436 665 1302	10.93 11.12 11.12	41 41 43 42
458 4347 478	1.590 4732 632 4766 674 4299 716 3332	2• 6 76 4083 686 9364 697 2641 707 3967	11.87 12.10 12.34 12.57	1.610 1086 652 6306 695 1019 737 5225	2.675 9027 686 4664 696 8278 706 9917	11.83 12.06 12.30 12.54	45 43 47 8 5
$ 5\frac{1}{8} $ $ 5\frac{1}{4} $ $ 5\frac{3}{8} $ $ 5\frac{1}{2} $	1.758 1867 799 9905 841 7446 883 4492	2·717 3395 727 0977 736 6762 746 0800	12.81 13.05 13.29 13.54	1.779 8927 822 2126 864 4822 906 7017	2·716 9636 726 7490 736 3528 745 7800	12.77 13.02 13.26 13.51	5½ 5½ 5½ 5½
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	1.925 1045 966 7105 2.008 2673 049 7751	2·755 3138 764 3823 733 2899 782 0413	13.78 14.03 14.28 14.66	1.948 8712 990 9908 2.033 0607 075 0810	2·755 0357 764 1247 773 0513 781 8201	13.75 14.00 14.26 14.64	5 5 5 7 5 8 6
$\begin{array}{c} 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7 \end{array}$	2·132 6440 215 3182 297 7986 380 0860	2·799 0918 815 5667 831 4970 846 9119	15·17 15·69 16·22 16·75	2·158 9730 242 6678 326 1665 409 4698	2.798 9022 815 4043 831 3580 846 7930	15°15 15°67 16°20 16°73	6½ 6½ 6¾ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2.462 1814 544 0856 625 7996 707 3242	2·861 8389 876 3038 890 3309 903 9429	17·28 17·82 18·37 18·91	2·492 5787 575 4941 658 2169 740 7480	2·861 7373 876 2170 890 2568 903 8796	17·27 17·81 18·35 18·90	71 71 73 8
81 81 83 83 9	2.788 6603 869 8088 950 7705 3.031 5463	2·917 1610 930 0054 942 4947 954 6465	19.46 20.02 20.57 21.13	2·823 0882 905 2385 987 1998 3·068 9728	2·917 1071 929 9594 942 4556 954 6132	19.45 20.01 20.26 21.12	81 81 83 9
9½ 9½ 9¾ 10	3·112 1371 192 5437 272 7668 352 8075	2·966 4773 978 0025 989 2364 T·000 1928	21.69 22.25 22.82	3°150 5585 231 9578 313 1714 394 2002	2·966 4489 977 9783 989 2158 1·000 1753	21.68 22.25 22.81	9½ 9½ 9¾ 10

	83 7	Tears		8	34 Year	'S	
100 <i>i</i>	$\log (1+i)^{83}$	$\log \frac{1}{a_{83}}$	Factor	$\log (1+i)^{84}$	$\log \frac{1}{a_{84}}$	Factor	100 <i>i</i>
1 1 2	0·179 7831 358 6740	2·168 8004 250 1480	6.15	0·181 9492 362 9954	2·164 6073 246 8118	6·08 6·40	1 2
$\begin{array}{c c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$	0·403 2584 447 7876 492 2620 536 6815	2·269 4916 288 4462 307 0171 325 2095	6·59 6·73 6·87 7·01	0·408 1169 453 1827 498 1928 543 1475	285 4843 304 2296 322 5881	6.53 6.67 6.81 6.95	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{8} \\ 1\frac{7}{8} \\ 2 \end{array}$	0.581 0464 625 3567 669 6126 713 8143	2·343 0289 360 4809 377 5716 394 3069	7·16 7·31 7·47 7·63	0.588 0469 632 8911 677 6802 722 4144	2·340 5655 358 1678 375 4009 392 2714	7·10 7·25 7·41 7·57	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.757 9618 802 0553 846 0949 890 0808	2·410 6932 426 7369 442 4445 457 8226	7.79 7.96 8.13 8.30	0.767 0938 811 7186 856 2888 900 8047	2·408 7859 424 9508 440 7730 456 2594	7.73 7.90 8.07 8.25	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
25 23 24 27 8 3	0.934 0131 977 8919 1.021 7174 065 4897	2·472 8781 487 6176 502 0480 516 1761	8·48 8·66 8·85 9·04	0.945 2663 989 6738 1.034 0272 078 3269	2·471 4170 486 2528 500 7741 514 9876	8·43 8·61 8·79 8·98	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3 ½ 3 ½ 3 ½ 3 ½	1.169 2088 152 8750 196 4884 240 0490	2·530 0090 543 5534 556 8161 569 8039	9·23 9·42 9·62 9·83	1·122 5728 166 7651 210 9039 254 9894	2·528 9007 542 5205 555 8540 568 9083	9·18 9·37 9·58 9·78	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
35 33 37 8 4	1.283 5571 327 0127 370 4161 413 7672	2·582 5238 594 9822 607 1860 619 1416	10.03 10.24 10.46 10.67	1.299 0217 343 0009 386 9271 430 8005	2·581 6904 594 2071 606 4654 618 4721	9°99 10°20 10°41 10°63	35 34 37 4
$\begin{array}{c} 4_{8}^{1} \\ 4_{4}^{1} \\ 4_{8}^{3} \\ 4_{2}^{1} \end{array}$	1.457 0662 500 3133 543 5085 586 6521	2.630 8555 642 3341 653 5836 664 6102	10.89 11.11 11.34 11.56	1.474 6212 518 3893 562 1050 605 7684	2.630 2337 641 7569 653 0478 664 1132	10.85 11.07 11.30 11.53	4½ 4¼ 4¾ 4½ 4½
458 434 478 5	1.629 7441 672 7846 715 7738 758 7118	2.675 4200 686 0187 696 4123 706 6063	11.79 12.03 12.26 12.50	1.649 3796 692 9387 736 4458 779 9011	2.674 9590 685 5915 696 0164 706 2397	11.76 11.99 12.23 12.47	4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5
5½ 5½ 5½ 5½ 5½	1.801 5987 844 4347 887 2198 929 9541	716 6065 726 4179 736 0460 745 4960	12.74 12.98 13.23 13.47	1.823 3047 866 6568 909 9574 953 2066	2·716 2669 726 1036 735 7551 745 2268	12.71 12.95 13.20 13.45	51 51 53 51 51 51
5\frac{5}{8} 5\frac{3}{4} 5\frac{7}{8} 6	1.972 6379 2.015 2712 057 8541 100 3868	2·754 7727 763 8811 772 8259 781 6117	13.72 13.97 14.23 14.61	1.996 4046 2.039 5516 082 6476 125 6927	2·754 5238 763 6510 772 6131 781 4151	13.70 13.95 14.20 14.58	5\\\ 5\\\\ 5\\\\\ 5\\\\\\ 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	2·185 3019 270 0174 354 5343 438 8535	2·798 7238 815 2519 831 2278 846 6819	15·13 15·65 16·18 16·71	2·211 6309 297 3671 382 9022 468 2373	2·798 5561 815 1088 831 1058 846 5781	15·10 15·63 16·16 16·69	$6\frac{1}{4}$ $6\frac{1}{2}$ $6\frac{3}{4}$ 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2·522 9760 606 9025 690 6341 774 1717	2·861 6426 876 1363 890 1880 903 8211	17·25 17·79 18·34 18·89	2.553 3733 638 3110 723 0514 807 5955	2·861 5542 876 0612 890 1242 903 7668	17.23 17.78 18.32 18.88	74 71 73 73 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	2.857 5161 940 6683 3.023 6290 106 3993	2·917 0573 929 9171 942 4196 954 5826	19°44 20°00 20°55 21°11	2.891 9440 976 0980 3.060 0583 143 825 8	2·917 0113 929 8780 942 3864 954 5545	19.43 19.99 20.55 21.11	81 81 83 84 9
9 ¹ / ₄ 9 ¹ / ₂ 9 ³ / ₄ 10	3·188 9800 271 3719 353 5759 435 5929	2·966 4229 977 9561 989 1970 1·000 1593	21.68 22.24 22.81	3·227 4014 310 7860 393 9804 476 9856	2·966 3991 977 9360 989 1799 1·000 1448	21.67 22.23 22.80	91 91 93 93 10

85 Years					G XZ		is Or
					6 Year	'S	
100 <i>i</i>	$\log \left(1 + \boldsymbol{i}\right)^{85}$	log 1/a ₈₅	Factor	$\log (1 + \boldsymbol{i})^{86}$	$\log \frac{1}{a_{86}}$	Factor	100/
1 2	0·184 1153 367 3168	2·160 4748 243 5336	6·02 6·34	0·186 2813 371 6381	2·156 4016 240 3121	5·96 6·28	1
1½ 1¼ 1¾ 1½	0°412 9754 45 ⁸ 5777 504 1237 549 6136	2·263 2593 282 5787 301 4973 320 0207	6·47 6·61 6·75 6·89	0°417 8340 463 9727 510 0546 556 0796	2·260 2275 279 7279 298 8188 317 5061	6·41 6·55 6·69 6·83	14 14 14 12 12
158 134 178 2	0.595 0475 640 4255 685 7478 731 0146	2·338 1550 355 9063 373 2806 390 2851	7.04 7.19 7.35 7.51	0.602 0480 647 9599 693 8155 739 6148	2·335 7960 353 6949 371 2095 388 3465	6·98 7·14 7·29 7·46	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.776 2259 821 3819 866 4828 911 5286	2·406 9263 423 2110 439 1465 454 7397	7.68 7.84 8.02 8.19	0.785 3580 831 0452 876 6767 922 2524	2·405 1131 421 5163 437 5635 453 2623	7.62 7.79 7.96 8.14	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	0.956 5195 1.001 4556 046 3371 091 1641	2·469 9980 484 9287 499 5392 513 8367	8·37 8·56 8·74 8·93	0.967 7726 1.013 2374 058 6469 104 0013	2·468 6198 483 6440 498 3422 512 7222	8·32 8·50 8·69 8·88	25 23 27 8 3
$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$	1.135 9367 180 6551 225 3194 269 9297	2·527 8286 541 5224 554 9253 568 0446	9·13 9·33 9·53 9·73	1·149 3007 194 5452 239 7349 284 8701	2.526 7916 540 5579 554 0288 567 2118	9.08 9.28 9.48 9.69	3½ 3½ 3½ 3½
$3\frac{5}{8}$ $3\frac{3}{4}$ $3\frac{7}{8}$ 4	1.314 4862 358 9890 403 4381 447 8338	2·580 8876 593 4613 605 7728 617 8292	9.94 10.15 10.37 10.59	1·329 9507 374 9771 419 9492 464 8672	2·580 1144 592 7437 605 1072 617 2120	9.90 10.11 10.22	358 334 378 4
418 414 438 412	1.492 1762 536 4654 580 7015 624 8847	2·629 6373 641 2037 652 5353 663 6381	10.81 11.03 11.49	1.509 7312 554 5415 599 2980 644 0010	2.629 0652 640 6738 652 0446 663 1840	10.77 10.99 11.22 11.45	4½ 4¼ 438 412
45 43 47 47 5	1.669 0150 713 0927 757 1178 801 0904	2·674 5190 685 1840 695 6393 705 8907	11.72 11.96 12.19 12.43	1.688 6505 733 2467 777 7897 822 2797	2.674 0989 684 7955 695 2800 705 5586	11.69 11.92 12.16 12.40	45 43 47 5
5½ 5¼ 5½ 5½	1.845 0107 888 8789 932 6949 976 4591	2·715 9441 725 8051 735 4792 744 9718	12.68 12.92 13.17 13.42	1.866 7168 911 1010 955 4325 999 7115	2·715 6373 725 5217 735 2176 744 7304	12.65 12.89 13.14 13.39	5½ 5½ 5½ 5½
55 534 578 6	2.020 1714 063 8320 107 4410 150 9986	763 4335 772 4123 781 2297	13.67 13.92 14.18 14.56	2.043 9381 088 1123 132 2344 176 3044	754 0654 763 2279 772 2227 781 0548	13.64 13.90 14.12 14.24	5 ⁵ / ₈ 5 ⁷ / ₈ 6
$\begin{array}{c c} 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7\end{array}$	2·237 9598 324 7167 411 2701 497 6211	2·798 3982 814 9744 830 9917 846 4811	15.08 15.61 16.14 16.68	2·264 2887 352 0663 439 6380 527 0049	2·798 2497 814 8484 830 8848 846 3905	15.06 15.59 16.12 16.66	61 61 63 7
$\begin{array}{c c} 7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8 \end{array}$	2·583 7706 669 7195 755 4687 841 0192	2·861 4719 875 9913 890 0650 903 7168	17·22 17·76 18·31 18·87	2.614 1679 701 1279 787 8860 874 4430	2·861 3952 875 9264 890 0101 903 6703	17.20 17.75 18.30 18.85	7½ 7½ 7¾ 8
8 ¹ / ₄ 8 ¹ / ₂ 8 ³ / ₄ 9	2.926 3719 3.011 5277 096 4876 181 2523	2·916 9688 929 8421 942 3559 954 5287	19.42 19.98 20.54 21.10	2.960 7998 3.046 9575 132 9168 218 6788	2·916 9295 929 8089 942 3280 954 5050	19.41 19.97 20.53 21.09	81 81 82 83 9
9½ 9½ 9¾ 10	3.265 8229 350 2001 434 3850 518 3782	2·966 3773 977 9175 989 1644 1·000 1317	21·66 22·23 22·80	3·304 2443 389 6143 474 7895 559 7709	2·966 3573 977 9007 989 1502 1·000 1197		9½ 9½ 9¾ 10

	87 3	Tears			88 Year	.s	
100 <i>i</i>	$\log (1+i)^{87}$	log 1	Factor	$(\log 1 + i)^{88}$	$\log \frac{1}{a_{88}}$	Factor	100 <i>i</i>
1	0·188 4474 375 9595	2·152 3861 237 1456	5.90	0·190 6134 380 2809	2·148 4272 234 0334	5·84 6·16	1 2
1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ½	0·422 6925 469 3678 515 9854 562 5457	2·257 2502 276 9306 296 1927 315 0428	6·35 6·49 6·63 6·78	0.427 5510 474 7628 521 9163 569 0117	2·254 3259 274 1853 293 6178 312 6296	6·29 6·43 6·57 6·72	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
158 134 178 2	0.609 0486 655 4944 701 8831 748 2149	2·333 4874 351 5328 369 1860 386 4544	6.93 7.08 7.24 7.40	0.616 0492 663 0288 709 9507 756 8151	2·331 2274 349 4182 367 2089 384 6072	6.87 7.03 7.18 7.35	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.794 4900 840 7086 886 8706 932 9763	2·403 3450 419 8653 436 0229 451 8256	7.57 7.74 7.91 8.09	0.803 6221 850 3719 897 0645 943 7002	2·401 6205 418 2566 434 5232 450 4285	7.51 7.68 7.86 8.04	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
25/8 23/4 27/8 3	0.979 0258 1.025 0193 070 9568 116 8385	2·467 2810 482 3972 497 1819 511 6430	8·27 8·45 8·64 8·84	0.990 2790 1.036 8011 083 2666 129 6758	2·465 9805 481 1872 496 0569 510 5977	8·22 8·41 8·60 8·79	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
3½ 3¼ 3¾ 3½ 3½	1.162 6647 208 4352 254 1505 299 8104	2·525 7884 539 6259 553 1634 566 4087	9.03 9.23 9.44 9.64	1.176 0286 222 3253 268 5660 314 7508	2·524 8177 538 7251 552 3279 565 6341	9·60 9·19 9·19	$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$
35 33 37 4	1.345 4153 390 9652 436 4602 481 9005	2·579 3695 592 0531 604 4673 616 6194	9.86 10.07 10.29 10.51	1·360 8798 406 9533 452 9712 498 9339	2·578 6518 591 3885 603 8522 616 0503	9.81 10.03 10.47	35 33 37 4
4½ 4¼ 4¾ 4½ 4½	1·527 2863 572 6175 617 8945 663 1173	2.628 5167 640 1661 651 5750 662 7498	10.73 10.96 11.19 11.42	1.544 8413 590 6936 636 4910 682 2336	2.627 9904 639 6797 651 1255 662 3348	10.69 10.92 11.12 11.38	$\begin{array}{c} 4\frac{1}{8} \\ 4\frac{1}{4} \\ 4\frac{3}{8} \\ 4\frac{1}{2} \end{array}$
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	753 4007 798 4617 843 4690	2.673 6977 684 4247 694 9377 705 2426	11.65 11.89 12.13 12.37	1.727 9214 773 5548 819 1337 864 6583	2.673 3145 684 0712 694 6116 704 9418	11.62 11.86 12.10 12.34	4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5
5½ 5¼ 5½ 5½ 5½	1.888 4228 933 3231 978 1701 2.022 9640	2·715 3456 725 2527 734 9695 744 5016	12.62 12.86 13.11 13.36	1.910 1288 955 5452 2.000 9077 046 2164	2·715 0683 724 9972 734 7340 744 2849	12·59 12·84 13·09 13·34	$5\frac{1}{8}$ $5\frac{1}{4}$ $5\frac{3}{8}$ $5\frac{1}{2}$
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	2.067 7048 112 3927 157 0278 201 6103	2·753 8546 763 0336 772 0436 780 8899	13.62 13.87 14.13 14.52	2.091 4715 136 6731 181 8213 226 9161	2.753 6550 762 8498 771 8747 780 7345	13.26 13.85 14.11 14.20	5 ½ 5 ½ 5 ½ 6
$\begin{array}{c c} 6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7 \end{array}$	2·290 6177 379 4159 468 0059 556 3887	2·798 1099 814 7301 830 7847 846 3058	15.04 15.57 16.11 16.65	2·316 9466 406 7655 496 3738 585 7724	2·797 9784 814 6189 830 6909 846 2267	15.02 15.56 16.09 16.63	61 61 63 7
71/4 71/2 73/4 8	2.644 5652 732 5364 820 3033 907 8667	2·861 3236 875 8660 889 9591 903 6272	17·19 17·74 18·29 18·85	2.674 9625 763 9449 852 7205 941 2905	2.861 2570 875 8098 889 9118 903 5874	17·18 17·73 18·28 18·84	$7\frac{1}{4}$ $7\frac{1}{2}$ $7\frac{3}{4}$ 8
81 81 83 83 9	2·995 2277 3·082 3872 169 3461 256 1053	2·916 8933 929 7784 942 3022 954 4834	19.40 19.96 20.52 21.09	3.029 6556 117 8170 205 7754 293 5318	2·916 8598 929 7502 942 2786 954 4635	19·39 19·95 20·52 21·08	81 81 83 83 9
9¼ 9½ 9¾ 10	3·342 6658 429 0284 515 1940 601 1636	2·966 3391 977 8854 989 1372 1·000 1088	21.65 22.22 22.79	3·381 0872 468 4425 555 5985 642 5563	2·966 3224 977 8713 989 1254 1·000 0989	21.65 22.21 22.78	91 91 93 10

89 Years				90 Years				
100/	$\log (1+i)^{89}$		Factor	$\log (1+i)^{90}$	$\log \frac{1}{\hat{s}_{q_0}}$	1	7003	
1007	10g (1+1)	$\log \frac{1}{a_{89}}$	Factor	10g (1+1)	10g a ₉₀	Factor	1001	
12	0·192 7795 384 6023	2·144 5235 230 9739	5.48 6.10	0°194 9456 388 9236	2·140 6737 227 9652	5°73 6°05	12	
$\begin{array}{c} 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{8}} \\ 1_{\frac{1}{2}} \end{array}$	0.432 4096 480 1578 527 8472 575 4778	2·251 4534 271 4909 291 0926 310 2649	6·24 6·38 6·52 6·67	0.437 2681 485 5529 533 7780 581 9438	2·248 6313 268 8462 288 6160 3°7 9479	6·18 6·32 6·47 6·61	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
$egin{array}{c} 1rac{5}{8} \\ 1rac{3}{4} \\ 1rac{7}{8} \\ 2 \\ \end{array}$	0.623 0497 670 5632 718 0183 765 4153	2·329 0150 347 3499 365 2770 382 8038	6.82 6.97 7.13 7.30	0.630 0503 678 0976 726 0860 774 0155	2·326 8490 345 3267 363 3888 381 0431	6·77 6·92 7·08 7·24	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2	
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.812 7542 860 0352 907 2584 954 4240	2·399 9386 416 6890 433 0633 449 0699	7·46 7·63 7·81 7·99	0.821 8863 869 6985 917 4523 965 1479	2·398 2979 415 1613 431 6421 447 7484	7·41 7·58 7·76 7·94	2\frac{1}{8} 2\frac{1}{4} 2\frac{3}{8} 2\frac{1}{1} 2	
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	1.001 5321 048 5829 095 5765 142 5130	2·464 7169 480 0129 494 9662 509 5853	8·17 8·36 8·55 8·75	1.012 7853 060 3647 107 8863 155 3502	2.463 4891 478 8730 493 9086 508 6046	8·13 8·31 8·51 8·70	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	
3½ 3½ 3½ 3½ 3½	1·189 3926 236 2154 282 9815 329 6911	2·523 8786 537 8545 551 5212 564 8871	8·94 9·15 9·56	1·202 7565 250 1054 297 3970 344 6315	2·522 9698 537 0128 550 7423 564 1665	8·90 9·10 9·52	3½ 3¼ 3½ 3½ 3½	
35 334 37 4	1·376 3444 422 9414 469 4823 515 9672	2.577 9603 590 7489 603 2608 615 5038	9.77 9.99 10.21 10.43	1·391 8089 438 9295 485 9933 533 0005	2.577 2941 590 1333 602 6923 614 9789	9.74 9.95 10.17 10.40	35 34 37 4	
418 414 438 412	1.562 3963 608 7697 655 0875 701 3498	2.627 4856 639 2136 650 6954 661 9380	10.66 10.89 11.12 11.35	1.579 9513 626 8457 673 6840 720 4661	2.627 0013 638 7670 650 2837 661 5586	10.62 10.85 11.09 11.32	41 41 43 41 42	
45/8 43/4 47/8 5	1.747 5569 793 7088 839 8057 885 8476	2·672 9485 683 7339 694 3007 704 6556	11.59 11.83 12.07 12.32	1.767 1924 813 8628 860 4776 907 0369	2.672 5991 683 4122 694 0047 704 3832	11.56 11.80 12.04 12.29	45 43 47 5	
5½ 5½ 5½ 5½	1.931 8348 977 7673 2.023 6453 069 4689	724 7546 734 5108 744 0795	12·56 12·81 13·06 13·32	1.953 5408 999 9894 2.046 3829 092 7214	2·714 5543 724 5242 734 2991 743 8849	12·54 12·79 13·04 13·29	51 51 52 52	
5 ⁵ / ₈ 5 ³⁴ / ₈ 6	2·115 2383 160 9535 206 6147 252 2220	753 4662 762 6763 771 7151 780 5878	13.57 13.83 14.09 14.48	2·139 0050 185 2338 231 4081 277 5279	2·753 2874 762 5121 771 5643 780 4495	13.55 13.81 14.07 14.46	5½ 5¾ 5¼ 6	
61 61 62 63 7	2·343 2755 434 1151 524 7416 615 1562	2·797 8547 814 5147 830 6030 846 1528	15.01 15.54 16.08 16.62	553 1095	2·797 7 383 814 4167 830 5208 846 0837	14.99 15.52 16.06 16.61	61 61 63 63 7	
$\begin{array}{ c c }\hline 7_{\frac{1}{4}} \\ 7_{\frac{1}{2}} \\ 7_{\frac{3}{4}} \\ 8 \\ \end{array}$	2.705 3598 795 3533 885 1378 974 7142	2·861 1947 875 7575 889 8679 903 5506	17·17 17·72 18·27 18·83	2.735 7571 826 7618 917 5551 3.008 1380	2·861 1368 875 7089 889 8271 903 5164	17·16 17·71 18·26 18·82	7½ 7½ 7¾ 8	
8½ 8½ 8¾ 9	3.064 0835 153 2467 242 2046 330 9583	2·916 8288 929 7242 942 2568 954 4452	19·39 19·95 20·51 21·08	3.098 5115 188 6764 278 6339 368 3848	2·916 8002 929 7003 942 2368 954 4285	19·38 19·94 20·51 21·07	81 81 82 83 84 9	
9½ 9½ 9¾ 10	3.419 5087 507 8566 596 0031 683 9490	2.966 3071 977 8585 989 1147 1.000 0900	21.64 22.21 22.78	3.457 9301 547 2707 636 4076 725 3417	2.966 2931 977 8468 989 1050 1.000 0817	21.64 22.21 22.78	9½ 9½ 9¾ 10	

	91 7	Tears		92 Years			
100 <i>i</i>	$\log (1+i)^{91}$	$\log \frac{1}{a_{91}}$	Factor	$\log (1+i)^{92}$	$\log \frac{1}{\bar{a}_{92}}$	Factor	100 <i>i</i>
1	0·197 1116 393 2450	2·136 8767 225 0072	5·67 5·99	0·199 2777 397 5664	2·133 1312 222 0981	5·62 5·94	1 2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.442 1266 490 9479 539 7089 588 4098	2.245 8587 266 2496 286 1867 305 6771	6·13 6·27 6·41 6·56	0.446 9852 496 3429 545 6398 594 8759	263 7003 283 8036 303 4514	6.08 6.36 6.51	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
15 13 17 2	0.637 0508 685 6320 734 1536 782 6156	2·324 7280 343 3475 361 5434 379 3239	6.71 6.87 7.03 7.19	0.644 0514 693 1664 742 2212 791 2158	2·322 6512 341 4112 359 7395 377 6448	6.66 6.82 6.98 7.15	$\begin{array}{c c} 1_{\frac{5}{8}} \\ 1_{\frac{3}{4}} \\ 1_{\frac{7}{8}} \\ 2 \end{array}$
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{6} \\ 2\frac{1}{2} \end{array}$	0.831 0183 879 3618 927 6462 975 8718	2·396 6974 413 6726 430 2582 446 4631	7·36 7·54 7·71 7·89	0.840 1504 889 0251 937 8402 986 5956	2·395 1359 412 2214 428 9107 445 2127	7·32 7·49 7·67 7·85	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	1.024 0385 072 1466 120 1962 168 1874	2·462 2962 477 7664 492 8830 507 6546	8.08 8.27 8.46 8.66	1.035 2916 083 9284 132 5060 181 0247°	2·461 1368 476 6923 491 8883 506 7342	8·04 8·23 8·42 8·62	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
31/4 31/4 31/2 31/2	1.216 1205 263 9955 311 8126 359 5718	2·522 0904 536 1993 549 9900 563 4714	8·86 9·06 9·27 9·48	1·229 4845 277 8855 326 2281 374 5122	2·521 2393 535 4128 549 2635 562 8009	8·82 9·02 9·23 9·45	31 31 32 32 32
3 ⁵ / ₈ 3 ³ / ₄ 3 ⁷ / ₈ 4	1.407 2735 454 9176 502 5043 550 0339	2·576 6523 589 5408 602 1455 614 4748	9.70 9.92 10.13 10.36	1°422 7380 470 9057 519 0154 567 0672	2·576 0337 588 9705 601 6200 613 9908	9.66 9.88 10.10 10.33	358 334 378 4
41 41 43 42	1.597 5063 644 9218 692 2805 739 5824	2.626 5367 638 3391 649 8895 661 1959	10.59 10.82 11.06 11.29	1.615 0613 662 9979 710 8769 758 6987	2.626 0910 637 9289 649 5124 660 8491	10·56 10·79 11·03 11·26	41 41 43 41 41
458 434 478 5	1.786 8279 834 0169 881 1496 928 2262	2.672 2654 683 1052 693 7225 704 1239	11.53 11.77 12.02 12.26	1.806 4633 854 1709 901 8216 949 4155	2.671 9466 682 8124 693 4536 703 8770	11.20 11.75 11.99 12.24	45 43 47 8 5
51/4 51/4 53/8 51/2	1.975 2468 2.022 2115 069 1205 115 9738	2·714 3160 724 3055 734 0983 743 7006	12.21 12.76 13.02 13.27	1.996 9528 2.044 4336 091 8581 139 2263	724 0896 724 0977 733 9077 743 5259	12·49 12·74 13·00 13·25	51 51 53 53 51 51
558 534 578 6	2·162 7717 209 5142 256 2015 302 8337	2·753 1184 762 3570 771 4222 780 3191	13.53 13.79 14.05 14.44	2·186 5384 233 7946 280 9949 328 1396	762 2104 771 2879 780 1962	13·51 13·77 14·03 14·43	55 534 578 6
61 61 63 7	2*395 9334 488 8143 581 4774 673 9238	2·797 6288 814 3248 830 4437 846 0192	14.97 15.51 16.60	2·422 2624 516 1639 609 8453 703 3075	2·797 5257 814 2386 830 3715 845 9588	14.96 15.50 16.04 16.59	6½ 6½ 6¾ 7
7¼ 7½ 7¾ 8	2.766 1544 858 1703 949 9724 3.041 5618	2·861 0827 875 6637 889 7893 903 4849	17·15 17·70 18·25 18·81	2.796 5517 889 5787 982 3896 3.074 9855	2·861 0324 875 6217 889 7542 903 4556	17·14 17·69 18·25 18·81	7½ 7½ 7¾ 8
81 81 82 83 9	3·132 9394 224 1062 315 0632 405 8113	2.916 7738 929 6782 942 2183 954 4131	19·37 19·94 20·50 21·07	3·167 3673 259 5359 351 4924 443 2378	2·916 7494 929 6579 942 2014 954 3991	19·37 19·93 20·50 21·06	81 81 83 9
91 91 92 93 10	3.496 3515 586 6848 676 8121 766 7344	2·966 2803 977 8361 989 0961 1·000 0743	21.63 22.20 22.77	3.534 7730 626 0990 717 2167 808 1270	2·966 2685 977 8264 989 0879 1·000 0676	21.63 22.20 22.77	9½ 9½ 9¾ 10

	93 7	Tears			4 Year	'S	TO GE
100 <i>i</i>	$\log (1 + \mathbf{i})^{93}$	$\log \frac{1}{a_{93}}$	Factor	$\log (1+i)^{94}$	log 1	Factor	100/
1 1 2	0°20I 4437 40I 8878	2·129 4361 219 2368	5·57 5·89	0°203 6098 406 2091	2·125 7904 216 4222	5·52 5·84	1 1
$\begin{array}{c c} 1_{\frac{1}{8}} \\ 1_{\frac{1}{4}} \\ 1_{\frac{3}{8}} \\ 1_{\frac{1}{2}} \end{array}$	0.451 8437 501 7380 551 5706 601 3419	2·240 4566 261 1972 281 4656 301 2697	6.03 6.17 6.31 6.46	0.456 7023 507 1330 557 5015 607 8080	2·237 8250 258 7390 279 1716 299 1308	5.98 6.12 6.26 6.41	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$\begin{array}{c c} 1_{\frac{5}{8}} \\ 1_{\frac{3}{4}} \\ 1_{\frac{7}{8}} \\ 2 \end{array}$	0.651 0519 700 7009 750 2888 799 8160	339 5165 357 9761 376 0050	6.61 6.77 6.93 7.10	0.658 0525 708 2353 758 3564 808 4161	2·318 6248 337 6623 356 2521 374 4034	6·57 6·72 6·89 7·05	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.849 2825 898 6885 948 0341 997 3195	2·393 6123 410 8069 427 5985 443 9964	7·27 7·44 7·62 7·81	0.858 4145 908 3518 958 2280 1.008 0433	2·392 1254 409 4279 426 3205 442 8129	7·22 7·40 7·58 7·76	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$
$\begin{array}{c c} 2\frac{5}{8} \\ 2\frac{3}{4} \\ 2\frac{7}{8} \\ 3 \end{array}$	1.046 5448 095 7102 144 8159 193 8619	2·460 0101 475 6494 490 9236 505 8425	7.99 8.18 8.38 8.58	1.057 7980 107 4921 157 1257 206 6991	2·458 9150 474 6368 489 9880 504 9785	7.95 8.14 8.34 8.54	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3
$3\frac{1}{6}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$	1.242 8484 291 7756 340 6436 389 4525	2·520 4156 534 6523 548 5621 562 1541	8·78 8·99 9·20 9·41	1.256 2124 305 6657 355 0591 404 3929	2·519 6184 533 9171 547 8844 561 5300	8·74 8·95 9·16 9·38	3\frac{1}{8} 3\frac{1}{4} 3\frac{3}{8} 3\frac{1}{2}
35 33 37 4	1.438 2026 486 8938 535 5264 584 1006	2·575 4375 588 4214 601 1146 613 5258	9.63 9.85 10.07 10.30	1.453 6671 502 8819 552 0375 601 1339	587 8929 600 6286 613 0791	9°59 9°82 10°04 10°27	35 33 37 4 4
41 41 43 41 41	1.632 6163 681 0739 729 4734 777 8150	2.625 6634 637 5358 649 1513 660 5174	10°53 10°76 11°00 11°24	1.650 1714 699 1500 748 0699 796 9313	2.625 2532 637 1592 648 8056 660 2004	10°50 10°73 10°97 11°21	41 41 43 41 41
458 434 478 5	1.826 0988 874 3249 922 4936 970 6048	2.671 6422 682 5331 693 1974 703 6421	11·48 11·72 11·97 12·22	1.845 7343 894 4790 943 1655 991 7941	2.671 3514 682 2666 692 9532 703 4185	11.45 11.70 11.94 12.19	45 43 47 5
51 51 52 52	2.018 6588 066 6557 114 5956 162 4787	723 9004 733 7271 743 3605	12·47 12·72 12·98 13·23	2.040 3648 088 8778 137 3332 185 7312	2·713 6695 723 7131 733 5557 743 2036	12·45 12·70 12·96 13·21	5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
5 ⁵ / ₈ 5 ⁷ / ₈ 6	2.210 3051 258 0750 305 7884 353 4455	2.752 8068 762 0718 771 1611 780 0801	13.49 13.75 14.02 14.41	2*234 0719 282 3553 330 5818 378 7513	2·752 6634 761 9408 771 0412 779 9708	13·47 13·74 14·00 14·40	55 53 57 6
6 ¹ / ₄ 6 ¹ / ₂ 6 ³ / ₄ 7	2·448 5913 543 5135 638 2132 732 6913	2·797 4287 814 1575 830 3039 845 9025	14.94 15.48 16.03 16.58	2°474 9202 570 8631 666 5811 762 0751	2·797 3375 814 0816 830 2406 845 8498	14.93 15.47 16.02 16.57	61 61 63 7
7¼ 7½ 7¾ 8	2.826 9490 920 9872 3.014 8069 108 4093	2·860 9854 875 5825 889 7216 903 4285	17·13 17·68 18·24 18·80	2.857 3463 952 3956 3.047 2242 141 8330	2·860 9416 875 5462 889 6914 903 4034	17·12 17·67 18·23 18·79	7½ 7½ 7¾ 8
81 81 83 9	3°201 7952 294 9657 387 9217 480 6643	2·916 7269 929 6392 942 1859 954 3861	19·36 19·93 20·49 21·06	3.236 2231 330 3954 424 3510 518 0908	2·916 7061 929 6219 942 1716 954 3742	19·36 19·92 20·49 21·05	81 81 82 83 9
9½ 9½ 9¾ 10	3.573 1944 665 5131 757 6212 849 5197	2.966 2578 977 8174 989 0805 1.000 0614	21.63 22.20 22.77	3.611 6159 704 9272 798 0257 890 9124	2·966 2480 977 8093 989 0738 1·000 0558	21.62 22.19 22.76	9½ 9½ 9¾ 10

	95 7	Tears		96 Years			
100 <i>i</i>	$\log (1+i)^{95}$	$\log \frac{1}{a_{95}}$	Factor	$\log (1+i)^{96}$	$\log \frac{1}{a_{96}}$	Factor	100 <i>i</i>
1 2	0·205 7759 410 5305	2·122 1929 213 6535	5°47 5°79	0.207 9419 414 8519	2·118 6427 210 9293	5·42 5·74	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.461 5608 512 5280 563 4324 614 2740	2·235 2382 256 3246 276 9204 297 0339	5.93 6.07 6.21 6.36	0.466 4193 517 9231 569 3633 620 7401	2·232 6918 253 9533 274 7112 294 9778	5.88 6.02 6.17 6.32	$1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$
$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2	0.665 0531 715 7697 766 4241 817 0163	2·316 6734 335 8477 354 5666 372 8388	6.52 6.68 6.84 7.01	0.672 0536 723 3041 774 4917 825 6165	2·314 7615 334 0718 352 9182 371 3104	6·47 6·63 6·80 6·96	15 13 17 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.867 5466 918 0151 968 4219 1.018 7672	2·390 6746 408 0836 425 0758 441 6615	7·18 7·36 7·54 7·72	0·876 6787 927 6784 978 6158 1·029 4911	2·389 2585 406 7728 423 8635 440 5410	7·14 7·31 7·50 7·68	21 21 23 21 21 21
25 23 27 8 3	1.069 0512 119 2739 169 4356 219 5363	2·457 8506 473 6535 489 0804 504 1414	7.91 8.10 8.30 8.50	1.080 3043 131 0557 181 7454 232 3736	2·456 8159 472 6987 488 2000 503 3302	7.87 8.06 8.26 8.46	25 23 27 3
314 314 318 319 319	1·269 5764 319 5557 369 4746 419 3332	2·518 8467 533 2063 547 2301 560 9279	8.70 8.91 9.13 9.34	1·282 9403 333 4458 383 8902 434 2736	2·518 0997 532 5189 546 5979 560 3469	8.67 8.88 9.09 9.31	3
358 334 378 4	1.469 1316 518 8700 568 5485 618 1672	2.574 3094 587 3841 600 1613 612 6501	9.56 9.78 10.01 10.24	1.484 5962 534 8581 585 0595 635 2006	2·573 7757 586 8942 599 7118 612 2380	9.53 9.75 9.98 10.21	3 3 4
41/4 41/4 43/8 41/2	1.667 7264 717 2260 766 6664 816 0476	2.624 8595 636 7981 648 4746 659 8971	10.47 10.71 10.94 11.18	1.685 2814 735 3021 785 2629 835 1639	2.624 4818 636 4521 648 1578 659 6071	10.44 10.68 10.92 11.16	4 4 4
45 43 47 5	1.865 3697 914 6330 963 8375 2.012 9834	2.671 0738 682 0123 692 7205 703 2056	11.43 11.67 11.92 12.17	1.885 0052 934 7870 984 5095 2.034 1727	2.670 8084 681 7697 692 4988 703 0030	11.40 11.65 11.90 12.15	4 4 5
5 1 5 3 8 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	2.062 0708 111 0999 160 0708 208 9837	2·713 4748 723 5351 733 3930 743 0552	12.43 12.68 12.94 13.20	2.083 7768 133 3220 182 8084 232 2361	2·713 2897 723 3661 733 2387 742 9144	12.41 12.66 12.92 13.18	5 5 5 5
55 53 57 6	2·257 8386 306 6357 355 3752 404 0572	2·752 5277 761 8168 770 9281 779 8675	13°46 13°72 13°98 14°38	2·281 6053 330 9161 380 1686 429 3631	2·752 3993 761 6997 770 8214 779 7702	13°44 13°70 13°97 14°37	5 5 5 6
$6\frac{1}{4} \\ 6\frac{1}{2} \\ 6\frac{3}{4} \\ 7$	2·501 2492 598 2127 694 9490 791 4589	2·797 2516 814 0102 830 1813 845 8006	14.92 15.46 16.01 16.56	2·527 5781 625 5623 723 3168 820 8427	2·797 1708 813 9432 830 1257 845 7546	14.91 15.45 16.00 16.55	6 6 7
$7\frac{1}{4} \\ 7\frac{1}{2} \\ 7\frac{3}{4} \\ 8$	2.887 7436 983 8041 3.079 6415 175 2568	2·860 9008 875 5123 889 6634 903 3802	17·11 17·67 18·23 18·79	2.918 1409 3.015 2126 112 0588 208 6805	2·860 8627 875 4808 889 6374 903 3586	17·10 17·66 18·22 18·78	7 7 7 8
8½ 8½ 8¾ 9	3.270 6510 365 8251 460 7802 555 5173	2·916 6869 929 6060 942 1584 954 3634		3°305 0789 401 2549 497 20 95 592 9438	2.916 6691 929 5914 942 1463 954 3534	19°35 19°91 20°48 21°05	8 8 9
9¼ 9½ 9¾ 10	3.650 0373 744 3413 838 4302 932 3051	2.966 2390 977 8019 ,989 0676 T.000 0508	21.62	3.688 4588 783 7554 878 8348	2.966 2307 977 7951 989 0620 1.000 0461	21.62 22.19 22.76	9 9 10

	97 3	Tears			98 Year	'S	
100 <i>i</i>	log (1 + i) ⁹⁷	$\log \frac{1}{a_{97}}$	Factor	$\log (1 + \mathbf{i})^{98}$	$\log \frac{1}{a_{98}}$	Factor	100/
1	0°210 1080 419 1733	2·115 1386 208 2489	5·37 5·70	0·212 2741 423 4946	2·111 6799 205 6112	5·32 5·65	1 2
$\begin{array}{c c} 1\frac{1}{8} \\ 1\frac{1}{4} \\ 1\frac{3}{8} \\ 1\frac{1}{2} \end{array}$	0.471 2779 523 3181 575 2941 627 2061	2·230 1952 251 6238 272 5430 292 9614	5.83 5.98 6.12 6.27	0.476 1364 528 7131 581 2250 633 6721	2·227 7371 249 3354 270 4147 290 9841	5.79 5.93 6.08 6.23	18 14 13 12
$\begin{array}{c c} 1\frac{5}{8} \\ 1\frac{3}{4} \\ 1\frac{7}{8} \\ 2 \end{array}$	0.679 0542 730 8385 782 5593 834 2167	2·312 8883 332 3334 351 3063 369 8172	6·43 6·59 6·75 6·92	0.686 0547 738 3730 790 6269 842 8168	2·311 0532 330 6319 349 7298 368 3582	6·38 6·55 6·71 6·88	$1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.885 8107 937 3417 988 8097 1.040 2149	2·387 8763 405 4946 422 6824 439 45°7	7.09 7.27 7.45 7.64	0.894 9428 947 0050 999 0037 1.050 9388	2·386 5273 404 2483 421 5320 438 3895	7.05 7.23 7.42 7.60	$2\frac{1}{8}$ $2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{1}{2}$
$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	1.091 5575 142 8376 194 0553 245 2108	2.455 8100 471 7715 487 3459 502 5440	7.83 8.03 8.22 8.43	1.102 8107 154 6194 206 3651 258 0480	2·454 8322 470 8710 486 5173 501 7822	7·79 7·99 8·19 8·39	25 23 27 27 3
3½ 3¼ 3½ 3½ 3½	1.296 3043 347 3358 398 3057 449 2139	2·517 3766 531 8541 545 9873 559 7864	8.63 8.84 9.06 9.28	1·309 6682 361 2259 412 7212 464 1543	2·516 6765 531 2114 545 3976 559 2454	8.60 8.81 9.03 9.25	31/4 31/4 33/8 31/2
35 33 37 8 4	1.500 0607 550 8462 601 5706 652 2339	2·573 2615 586 4226 599 2796 611 8421	9.50 9.72 9.95 10.18	1.515 5253 566 8343 618 0816 669 2673	2·572 7657 585 9686 598 8640 611 4618	9.47 9.69 9.92 10.15	35 33 37 37 4
4½ 4¼ 4% 4½	1.702 8364 753 3782 803 8594 854 2802	2.624 1193 636 1204 647 8544 659 3298	10.42 10.65 10.89 11.14	1.720 3914 771 4542 822 4559 873 3965	2.623 7715 635 8026 647 5640 659 0646	10·39 10·63 10·87 11·11	41 41 43 41 41
4 ⁵ / ₈ 4 ³ / ₄ 4 ⁷ / ₈ 5	1.904 6407 954 9411 2.005 1815 055 3620	2.670 5551 681 5383 692 2874 702 8101	11.38 11.63 11.88	1.924 2762 975 0951 2.025 8534 076 5513	2.670 3130 681 3174 692 0860 702 6264	11.36 11.61 11.86 12.11	45 43 47 8 5
5\\\ 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2·105 4829 155 5441 205 5460 255 4886	723 2055 733 0924 742 7810	12·39 12·64 12·90 13·16	2·127 1889 177 7662 228 2836 278 7410	2·712 9464 723 0531 732 9536 742 6545	12·37 12·63 12·89 13·15	51 51 52 51
5 ⁵ / ₈ 5 ³ / ₄ 5 ⁷ / ₈ 6	2·305 3720 355 1965 404 9621 454 6689	2·752 2777 761 5889 770 7206 779 6784	13·42 13·69 13·95 14·35	2·329 1388 379 4768 429 7555 479 9748	2·752 1627 761 4842 770 6254 779 5918	13.41 13.67 13.94 14.34	5 5 5 5 5 5 5 5 5 6 6
61/4 61/2 63/4 7	2.553 9071 652 9120 751 6847 850 2264	2·797 0948 813 8802 830 0737 845 7115	14·89 15·44 15·99 16·54	2.580 2360 680 2616 780 0526 879 6102	2·797 0232 813 8212 830 0250 845 6714	14.88 15.43 15.98 16.53	61 61 63 7
7 ¹ / ₄ 7 ¹ / ₂ 7 ³ / ₄ 8	2.948 5382 3.046 6210 144 4760 242 1043	2.860 8272 875 4516 889 6132 903 3387	17.09 17.65 18.21 18.78	2.978 9355 3.078 0295 176 8933 275 5280	2·860 7941 875 4243 889 5908 903 3204	17.65 18.21 18.77	7½ 7½ 7¾ 8
81 81 83 83 9	3·339 5068 436 6846 533 6388 630 3703	2·916 6527 929 5779 942 1351 954 3443	19·34 19·91 20·48 21·05	3°373 9347 472 1143 570 0680 667 7968	2·916 6376 929 5654 942 1249 954 3358	19°34 19°91 20°47 2 I °04	8½ 8½ 8¾ 9
91 91 93 10	3.726 8802 823 1696 919 2393 4.015 0905	2·966 2232 977 7889 989 0569 T·000 0419	21.62 22.19 22.76	3.765 3017 862 5837 959 6438 4.056 4831	2·966 2163 977 7832 989 0523 1·000 0381	21.61 22.18 22.76	91 91 91 10

		Zears	ANNUI	100 Years				
100 <i>i</i>	$\log \left(1+\boldsymbol{i}\right)^{99}$	$\log \frac{1}{a_{99}}$	Factor	$\log \left(1+\boldsymbol{i}\right)^{100}$	$\log \frac{1}{a_{100}}$	Factor	100 <i>i</i>	
1	0.214 4401 427 8160	2·108 2655 203 0153	5·28 5·60	0·216 6062 432 1374	2·104 8945 200 4604	5·23 5·56	12	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.480 9949 534 1082 587 1559 640 1382	2·225 3198 247 0869 268 3254 289 0446	5.74 5.89 6.03 6.19	0.485 8535 539 5032 593 0867 646 6042	2·222 9426 244 8776 266 2742 287 1424	5.70 5.84 5.99 6.14	1 1 1 1 3 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1	
158 134 178 2	0.693 0553 745 9074 798 6945 851 4170	2·309 2547 328 9656 348 1880 366 9325	6·34 6·50 6·67 6·84	0.700 0559 753 4418 806 7622 860 0172	2·307 4923 327 3342 346 6798 365 5393	6·30 6·46 6·63 6·80	$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}$	
$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	0.904 0749 956 6684 1.009 1976 061 6627	2·385 2104 403 0328 420 4111 437 3568	7·01 7·19 7·38 7·56	0.913 2070 966 3317 1.019 3915 072 3865	2·383 9246 401 8473 419 3190 436 3516	6·97 7·15 7·34 7·53	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{1}{4} \\ 2\frac{3}{8} \\ 2\frac{1}{2} \end{array}$	
$egin{array}{c} 2rac{5}{8} \ 2rac{3}{4} \ 2rac{7}{8} \ 3 \ \end{array}$	1°114 0638 166 4012 218 6750 270 8852	2·453 8813 469 9964 485 7134 501 0437	7·76 7·95 8·15 8·36	1.125 3170 178 1831 230 9848 283 7225	2·452 9569 469 1469 484 9333 500 3280	7·72 7·92 8·12 8·33	$2\frac{5}{8}$ $2\frac{3}{4}$ $2\frac{7}{8}$ 3	
$3\frac{1}{8}$ $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{1}{2}$	1°323 0322 375 1160 427 1367 479 0946	2·515 9987 530 5896 544 8277 558 7235	8·57 8·78 9·00 9·22	1.336 3962 389 0060 441 5523 494 0350	2·515 3425 529 9883 544 2770 558 2196	8·53 8·75 8·97 9·19	3½ 3¼ 3½ 3½ 3½ 3½	
358 334 378 4	1.530 9898 582 8224 634 5926 686 3006	2·572 2878 585 5313 598 4642 611 0964	9.44 9.67 9.90 10.13	1.546 4544 598 8105 651 1037 703 3339	2·571 8271 585 1103 598 0796 610 7453	9.41 9.64 9.87 10.10	$3\frac{5}{8}$ $3\frac{3}{4}$ $3\frac{7}{8}$ 4	
41 41 43 42	1.737 9464 789 5303 841 0524 892 5127	2.623 4377 635 4978 647 2859 658 8110	10.36 10.60 10.85 11.09	807 6064 859 6488 911 6290	2.623 1174 635 2058 647 0196 658 5685	10·34 10·58 10·82 11·07	41 41 43 41 42	
458 434 478 5	1.943 9116 995 2491 2.046 5254 097 7406	2.670 0817 681 1067 691 8940 702 4516	11·34 11·59 11·84 12·09	1.963 5471 2.015 4032 067 1974 118 9299	2.669 8608 680 9056 691 7111 702 2852	11.32 11.57 11.82 12.08	4 ⁵ / ₈ 4 ³ / ₈ 4 ⁷ / ₈ 5	
514 514 52 512	2·148 8949 199 9883 251 0212 301 9935	2·712 7873 722 9084 732 8219 742 5348	12·35 12·61 12·87 13·13	2·170 6009 222 2105 273 7588 325 2460	2·712 6360 722 7707 732 6969 742 4213	12·33 12·59 12·85 13·12	5½ 5½ 5½ 5½	
558 534 578 6	2·352 9055 403 7572 454 5489 505 2807	2·752 0538 761 3853 770 5355 779 5101	13.40 13.66 13.93 14.33	2·376 6722 428 0376 479 3423 530 5865	2·751 9507 761 2917 770 4505 779 4331	13.38 13.65 13.92 14.32	$ 5\frac{5}{8} $ $ 5\frac{3}{4} $ $ 5\frac{7}{8} $ $ 6 $	
61 62 63 7	2.606 5649 707 6112 808 4205 908 9940	2·796 9559 813 7657 829 9794 845 6340	14.87 15.42 15.97 16.52	2.632 8939 734 9608 836 7884 938 3778	2·796 8925 813 7136 829 9366 845 5988	14·86 15·41 15·96 16·52	61/4 61/2 63/4 7	
71 71 72 73 8	3.009 3328 109 4380 209 3106 308 9518	2·860 7633 875 3989 889 5700 903 3033	17.08 17.64 18.20 18.77	3.039 7301 140 8464 241 7279 342 3756	2·860 7345 875 3754 889 5507 903 2874	17.08 17.64 18.20 18.76	7½ 7½ 7¾ 8	
81 81 82 83 9	3·408 3626 507 5441 606 4973 705 2233	2·916 6236 929 5540 942 1155 954 3281	19°33 19°90 20°47 21°04	3.442 7905 542 9738 642 9266 742 6498	2·916 6106 929 5434 942 1069 954 3211	19·33 19·90 20·47 21·04	81 81 82 83 9	
91 91 93 10	3.803 7231 901 9978 4.000 0484 097 8758	2.966 2100 977 7780 989 0480 1.000 0347	21.61 22.18 22.75	3.842 1446 941 4119 4.040 4529 139 2685	2·966 2042 977 7733 989 0442 1·000 0315	21.61 22.18 22.75	9 ₄ 9 ₂ 9 ₃ 10	

SIMPLE INTEREST

Days = D	$\log \frac{D}{365}$	Days = D	$\log \frac{\mathrm{D}}{365}$	Days = D	$\log \frac{D}{365}$	Days = D	$\log \frac{D}{365}$
1	3·437 7071	51	1.145 2773	101	1°442 0285	151	7.616 6841
2	738 7371	52	153 7105	102	446 3073	152	619 5507
3	914 8284	53	161 9830	103	450 5444	153	622 3986
4	2·039 7671	54	170 1009	104	454 7405	154	625 2279
5	136 6771	55	178 0698	105	458 8964	155	628 0388
6	2.215 8584	56	1.185 8952	106	T·463 0130	156	1.630 8317
7	282 8052	57	193 5820	107	467 0909	157	633 6068
8	340 7971	58	201 1351	108	471 1309	158	636 3642
9	391 9496	59	208 5591	109	475 1336	159	639 1043
10	437 7071	60	215 8584	110	479 0998	160	641 8271
11	2·479 0998	61	1·223 0370	111	1.483 0301	161	1.644 5330
12	516 8884	62	230 0988	112	486 9252	162	647 2221
13	551 6505	63	237 0477	113	490 7856	163	649 8947
14	583 8352	64	243 8871	114	494 6120	164	652 5510
15	613 7984	65	250 6205	115	498 4050	165	655 1911
16	2.641 8271	66	7·257 2511	116	7·502 1651	166	1.657 8152
17	668 1561	67	263 7819	117	505 8930	167	660 4236
18	692 9796	68	270 2160	118	509 5891	168	663 0164
19	716 4607	69	276 5562	119	513 2541	169	665 5938
20	738 7371	70	282 8052	120	516 8884	170	668 1561
21	759 9264	71	T·288 9655	121	7·520 4925	171	7.670 7032
22	780 1298	72	295 0396	122	524 0670	172	673 2356
23	799 4350	73	301 0300	123	527 6122	173	675 7532
24	817 9184	74	306 9389	124	531 1288	174	678 2564
25	835 6471	75	312 7684	125	534 6171	175	680 7452
26	2·852 6805	76	1·318 5207	126	1.538 0777	176	7.683 2198
27	869 0709	77	324 1979	127	541 5109	177	685 6804
28	884 8652	78	329 8017	128	544 9171	178	688 1271
29	900 1051	79	335 3342	129	548 2968	179	690 5602
30	914 8284	80	340 7971	130	551 6505	180	692 9796
31	2·929 0688	81	T·346 1922	131	1.554 9784	181	7.695 3857
32	942 8571	82	351 5210	132	558 2811	182	697 7785
33	956 2211	83	356 7852	133	561 5588	183	700 1582
34	969 1861	84	361 9864	134	564 8119	184	702 5250
35	981 7752	85	367 1261	135	568 0409	185	704 8789
36	2·994 0096	86	I·372 2056 377 2264 382 1898 387 0971 391 9496	136	T·571 2460	186	7·707 2201
37	1·005 9089	87		137	574 4277	187	709 5487
38	017 4907	88		138	577 5862	188	711 8650
39	028 7717	89		139	580 7219	189	714 1689
40	039 7671	90		140	583 8352	190	716 4607
41	T·050 4910	91	ī·396 7485	141	T·586 9262	191	7:718 7405
42	060 9564	92	401 4950	142	589 9955	192	721 0084
43	071 1756	93	406 1901	143	593 0432	193	723 2644
44	081 1598	94	410 8350	144	596 0696	194	725 5089
45	090 9196	95	415 4307	145	599 0751	195	727 7417
46	Ī·100 4650	96	Ī*419 9784	146	ī·602 0600	196	ī·729 9632
47	109 8050	97	424 4789	147	605 0245	197	732 1734
48	118 9484	98	428 9332	148	607 9689	198	734 3723
49	127 9032	99	433 3423	149	610 8934	199	736 5602
50	136 6771	100	437 7071	150	613 7984	200	738 7371

For explanation see p. (68).

LOGARITHMS FOR DAYS

Days = D	$\log \frac{D}{365}$	Days = D	$\log \frac{D}{365}$	Days = D	$\log \frac{D}{365}$	Days = D	$\log \frac{D}{365}$
201 202 203 204 205	740 9032 743 0585 745 2032 747 3373 749 4610	251 252 253 254 255	1·837 3809 839 1077 840 8277 842 5409 844 2473	301 302 303 304 305	ī ·916 2736 917 7141 919 1498 920 5807 922 0070	351 352 353 354 355	7.983 0143 984 2498 985 4818 986 7104 987 9355
206 207 208 209 210	753 6775 753 6775 755 7705 757 8534 759 9264	256 257 258 259 260	1.845 9471 847 6403 849 3268 851 0069 852 6805	306 307 308 309 310	1.923 4286 924 8455 926 2579 927 6656 929 0688	356 357 358 359 360	1.989 1571 990 3754 991 5902 992 8016 994 0096
211 212 213 214 215	ī·761 9896 764 0430 766 0867 768 1209 770 1456	261 262 263 264 265	1.854 3476 856 0084 857 6629 859 3111 860 9530	311 312 313 314 315	1.930 4675 931 8617 933 2515 934 6368 936 0177	361 362 363 364 365	7.995 2143 996 4157 997 6138 998 8085 0.000 0000
216 217 218 219 220	772 1609 774 1669 776 1636 778 1513 780 1298	266 267 268 269 270	7.862 5888 864 2184 865 8419 867 4594 869 0709	316 317 318 319 320	1·937 3942 938 7664 940 1343 941 4978 942 8571		
221 222 223 224 225	784 0601 786 0120 787 9552 789 8897	271 272 273 274 275	1.870 6764 872 2760 873 8698 875 4577 877 0398	321 322 323 324 325	7*944 2122 945 5630 946 9097 948 2521 949 5905		
226 227 228 229 230	793 7330 795 6420 797 5426 799 4350	276 277 278 279 280	1.878 6162 880 1869 881 7519 883 3113 884 8652	326 327 328 329 330	1.950 9247 952 2549 953 5810 954 9030 956 2211		
231 232 233	7.801 3191 803 1951 805 0631	281 282 283	1.886 4135 887 9562 889 4936	331 332 333	7.957 5351 958 8452 960 1514		I log M
234 235	806 9230 808 7750	284 285	891 0255 892 5520	334 335	961 4536 962 7519	M	log 1/2
236 237 238 239 240	812 4555 814 2841 816 1050 817 9184	286 287 288 289 290	894 0732 895 5890 897 0996 898 6050 900 1051	336 337 338 339 340	7·964 0464 965 3370 966 6238 967 9068 969 1861	1 2 3 4	2·920 8188 1·221 8487 397 9400 522 8787
241 242 243 244 245	1·819 7242 821 5225 823 3134 825 0970 826 8732	291 292 293 294 295	1·901 6001 903 0900 904 5748 906 0545 907 5292	341 342 343 344 345	7:970 4615 971 7332 973 0013 974 2656 975 5262	5 6 7 8	7.619 7888 698 9700 765 9168 823 9087
246 247 248 249 250	1.828 6422 830 4041 832 1588 833 9065 935 6471	296 297 298 299 300	1.908 9988 910 4636 911 9234 913 3783 914 8284	346 347 348 349 350	7.976 7832 978 0366 979 2864 980 5326 981 7752	9 10 11 12	1.875 0613 920 8188 962 2114 0.000 0000

Logarithms of i. Each $\frac{1}{16}$ °/

1 °/°	O °/。	1 %	2 °/。	3 °/。	1 0/0
0 1 2 3	4·795 8800 173 3·096 9100 130 3·273 0012 721	2.000 0000 000 026 3289 387 051 1525 224 074 6336 183	2·301 0299 957 314 3939 572 327 3589 344 339 9480 617	2·477 1212 547 486 0760 974 494 8500 217 503 4501 934	0 1 2 3
4	3·397 9400 087	2.096 9100 130	2·352 1825 181	2·511 8833 610	4
5	494 8500 217	118 0993 121	364 0817 414	520 1558 869	5
6	574 0312 677	138 3026 982	375 6636 140	528 2737 772	6
7	640 9780 574	157 6078 534	386 9446 244	536 2427 068	7
8	3.698 9700 043.	2·176 0912 591	2·397 9400 087	2·544 0680 444	8
9	750 1225 268	193 8200 260	408 6638 741	551 7548 730	9
10	795 8800 173	210 8533 653	419 1293 077	559 3080 109	10
11	837 2727 025	227 2437 815	429 3484 729	566 7320 290	11
12	3.875 0612 634	2·243 0380 487	2·439 3326 938	2·574 0312 677	12
13	909 8233 697	258 2780 152	449 0925 311	581 2098 524	13
14	942 0080 530	273 0012 721	458 6378 490	588 2717 068	14
15	971 9712 764	287 2417 112	467 9778 753	595 2205 668	15
	4 °/。	5 °/。	6 °/。	7 °/。	
0	2.602 0599 913	2.698 9700 043	2·778 1512 504	2·845 0980 400	0
1	608 7933 740	704 3650 362	782 6517 516	848 9584 608	1
2	615 4239 529	709 6938 697	787 1060 930	852 7848 687	2
3	621 9548 200	714 9581 097	791 5152 119	856 5778 577	3
4	2.628 3889 301	2·720 1593 034	2·795 8800 173	2·860 3380 066	4
5	634 7291 081	725 2989 431	800 2013 911	864 0658 791	5
6	640 9780 574	730 3784 686	804 4801 891	867 7620 247	6
7	647 1383 661	735 3992 700	808 7172 420	871 4269 787	7
8	2.653 2125 138	2·740 3626 895	2·812 9133 566	2·875 0612 634	8
9	659 2028 775	745 2700 240	817 0693 164	878 6653 877	9
10	665 1117 371	750 1225 268	821 1858 826	882 2398 480	10
11	670 9412 807	754 9214 097	825 2637 950	885 7851 288	11
12	2.676 6936 096	2·759 6678 447	2·829 3037 728	2·889 3017 025	12
13	682 3707 425	764 3629 659	833 3065 153	892 7900 304	13
14	687 9746 200	769 0078 709	837 2727 025	896 2505 625	14
15	693 5071 086	773 6036 226	841 2029 961	899 6837 383	15
	8 °/.	9 °/。	10 °/。	11 °/	
0	2·903 0899 870	2.954 2425 094	ī·000 0000 000	ī·041 3926 852	0
1	906 4697 276	957 2480 195	002 7058 934	043 8532 837	1
2	909 8233 697	960 2328 731	005 3950 319	046 3000 197	2
3	913 1513 130	963 1973 521	008 0676 217	048 7330 483	3
4	2.916 4539 485	2.966 1417 327	T·010 7238 654	T·051 1525 224	4
5	919 7316 583	969 0662 858	013 3639 616	053 5585 922	5
6	922 9848 157	971 9712 764	015 9881 054	055 9514 053	6
7	926 2137 858	974 8569 646	018 5964 885	058 3311 071	7
8	2.929 4189 257	2.977 7236 053	1.021 1892 991 023 7667 220 026 3289 387 028 8761 277	ī·060 6978 404	8
9	932 6005 845	980 5714 482		063 0517 457	9
10	935 7591 037	983 4007 382		065 3929 616	10
11	938 8948 176	986 2117 155		067 7216 239	11
12	2.942 0080 530	2.989 0046 157		T·070 0378 666	12
13	945 0991 300	991 7796 698		072 3418 215	13
14	948 1683 617	994 5371 043		074 6336 183	14
15	951 2160 548	997 2771 417		076 9133 846	15

For explanation see pp. (64, 68).

LOGARITHMS

Logarithms of (1+i). Each $\frac{1}{16}$ $^{\circ}/_{\circ}$

1 0/0	O °/。	1 %	2 °/。	3 %	1 °/。
0	0.000 0000 000	0.004 3213 738	0.008 6001 718	0.012 8372 247	0
1	000 2713 493	5900 373	8662 021	013 1006 730	1
2	5425 291	8585 346	009 1320 695	3639 616	2
3	8135 397	005 1268 661	3977 743	6270 906	3
4	0.001 0843 813	0.005 3950 319	0.009 6633 167	0.013 8900 603	4
5	3550 541	6630 322	9286 968	014 1528 709	5
6	6255 583	9308 672	010 1939 148	4155 226	6
7	8958 941	006 1985 372	4589 709	6780 155	7
8	0.002 1660 618	0.006 4660 422	0.010 7238 654	0°014 9403 498	8
9	4360 614	7333 827	9885 984	015 2025 258	9
10	7058 934	007 0005 586	011 2531 701	4645 436	10
11	9755 578	2675 703	5175 808	7264 034	11
12	0.003 2450 548	0.007 5344 179	0.011 7818 305	0°015 9881 054	12
13	5143 847	8011 017	012 0459 196	016 2496 498	13
14	7835 477	008 0676 217	3098 482	5110 368	14
15	004 0525 440	3339 784	5736 165	7722 666	15
	4 "/。	5 °/,	6 °/,	7 °/,	
0	0.017 0333 393	0.021 1892 991	0.025 3058 653	0°029 3837 777	0
1	2942 552	4477 308	5618 597	6373 803	1
2	5550 144	7060 088	8177 033	8908 349	2
3	8156 172	9641 333	026 0733 962	030 1441 417	3
4	0.018 0760 636	0.022 222I 045	0.026 3289 387	0.030 3973 009	4
5	3363 540	4799 226	5843 310	6503 125	5
6	5964 885	7375 876	8395 731	9031 768	6
7	8564 672	9950 999	027 0946 653	0.031 1558 940	7
8	0.019 1162 904	0.023 2524 596	0.027 3496 078	0°031 4084 643	8
9	3759 583	5096 669	6044 007	6608 877	9
10	6354 710	7667 220	8590 442	9131 645	10
11	8948 287	024 0236 249	028 1135 385	032 1652 948	11
12	0.020 1540 316	0.024 2803 760	0.028 3678 837	0.032 4172 788	12
13	4130 800	5369 755	6220 801	6691 168	13
14	6719 738	7934 233	8761 277	9208 087	14
15	9307 135	025 0497 199	029 1300 269	033 1723 549	15
	8 °/。	9 °/。	10 °/。	11 °/。	
0	0.033 4237 555	0.037 4264 979	0.041 3926 852	0.045 3229 788	0
1	6750 106	6754 486	6393 733	5674 451	1
2	9261 205	9242 567	8859 214	8117 740	2
3	034 1770 852	038 1729 223	042 1323 296	046 0559 654	3
4	0.034 4279 050	0.038 4214 456	0.042 3785 981	0.046 3000 197	4
5	6785 801	6698 268	6247 271	5439 368	5
6	9291 105	9180 660	8707 166	7877 170	6
7	035 1794 965	039 1661 634	043 1165 668	047 0313 605	7
8	0.035 4297 382	0.039 4141 192	0.043 3622 780	0.047 2748 674	8
9	6798 358	6619 334	6078 503	5182 378	9
10	9297 895	9096 064	044 8532 837	7614 719	10
11	036 1795 993	040 1571 381	0985 785	048 0045 698	11
12	0.036 4292 656	0.040 4045 289	0.044 3437 349	0°048 2475 318	12
13	6787 885	6517 788	5887 529	49°3 579	13
14	9281 680	8988 881	8336 328	733° 483	14
15	037 1774 045	041 1458 568	045 0783 747	9756 032	15

For explanation see p. (60).

The Value of $\frac{1}{I}$

1 °/°	O °/。	1 %	2 °/。	3 °/。	1 %/0
0 1 2 3	1600.000 0000 800.000 0000 533.333 3333	100°000 0000 94°117 6471 88°888 8889 84°210 5263	50.000 0000 48.484 8485 47.058 8235 45.714 2857	33.333 3333 32.653 0612 32.000 0000 31.372 5490	0 1 2 3
4	400.000 0000	80.000 0000	44°444 4444	30·769 2308	4
5	320.000 0000	76.190 4762	43°243 2432	30·188 6792	5
6	266.666 6667	72.727 2727	42°105 2632	29·629 6296	6
7	228.571 4286	69.565 2174	41°025 6410	29·090 9091	7
8	200.000 0000	66.666 6667	40.000 0000	28·571 4286	8
9	177.777 7778	64.000 0000	39.024 3902	28·070 1754	9
10	160.000 0000	61.538 4615	38.095 2381	27·586 2069	10
11	145.454 5455	59.259 2593	37.209 3023	27·118 6441	11
12	133·333 3333	57·142 8571	36·363 6364	26.666 6667	12
13	123·076 9231	55·172 4138	35·555 5556	26.229 5082	13
14	114·285 7143	53·333 3333	34·782 6087	25.806 4516	14
15	106·666 6667	51·612 9032	34·042 5532	25.396 8254	15
	4 °/。	5 °/。	6 °/。	7 °/。	
0	25.000 0000	20.000 0000	16.666 6667	14.285 7143	0
1	24.615 3846	19.753 0864	16.494 8454	14.159 2923	1
2	24.242 4242	19.512 1951	16.326 5306	14.035 0877	2
3	23.880 5970	19.277 1084	16.161 6162	13.913 0435	3
4	23.529 4118	19·047 6190	16.000 0000	13.793 1034	4
5	23.188 4058	18·823 5294	15.841 5842	13.675 2137	5
6	22.857 1429	18·604 6512	15.686 2745	13.559 3220	6
7	22.535 2113	18·390 8046	15.533 9806	13.445 3782	7
8	22·222 2222	18·181 8182	15.384 6154	13°333 3333	8
9	21·917 8082	17·977 5281	15.238 0952	13°223 1405	9
10	21·621 6216	17·777 7778	15.094 3396	13°114 7541	10
11	21·333 3333	17·582 4176	14.953 2710	13°008 1301	11
12	21.052 6316	17·391 3043	14.814 8148	12.903 2258	12
13	20.779 2208	17·204 3011	14.678 8991	12.800 0000	13
14	20.512 8205	17·021 2766	14.545 4545	12.698 4127	14
15	20.253 1646	16·842 1053	14.414 4144	12.598 4252	15
	8 °/。	9 °/。	10 °/。	11 °/。	
0	12·500 0000	11.111 1111	10.000 0000	9.09 0 909 1	0
1	12·403 1008	11.034 4828	9.937 8882	9.03 9 548 0	1
2	12·307 6923	10.958 9041	9.876 5432	8.988 7640	2
3	12·213 7405	10.884 3537	9.815 9509	8.938 5475	3
4	12·121 2121	10.810 8108	9.756 0976	8.888 8889	4
5	12·030 0752	10.738 2550	9.696 9697	8.839 7790	5
6	11·940 2985	10.666 6667	9.638 5542	8.791 2088	6
7	11·851 8519	10.596 0265	9.580 8383	8.743 1694	7
8	11.764 7059	10·526 3158	9·523 8095	8.695 6522	8
9	11.678 8321	10·457 5163	9·467 4556	8.648 6486	9
10	11.594 2029	10·389 6104	9·411 7647	8.602 1505	10
11	11.510 7914	10·322 5806	9·356 7251	8.556 1497	11
12	11.428 5714	10·256 4103	9·302 3256	8.510 6383	12
13	11.347 5177	10·191 0828	9·248 5549	8.465 6085	13
14	11.267 6056	10·126 5823	9·195 4023	8.421 0526	14
15	11.188 8112	10·062 8931	9·142 8571	8.376 9634	15

For explanation see pp. (63, 64, and 206). (416)

Purchase of Leases, &c.

(1) Find the price to be paid for a lease yielding a clear annual rent of £132 for $25\frac{1}{2}$ years in order to make $3\frac{1}{2}$ % on the purchase price.

£11	er ann	um for 2	25½ yea	rs	=£16.777	See p
£132	22	"	,,	$= 16.777 \times 13$		
				or 132×16 =	2112	86
				$132 \times \frac{1}{2} =$	66	86
				$132 \times \frac{1}{4} =$	33	86
				$132 \times 16\frac{3}{4} =$	£2211	

There is a difference of £3.564 or £3.115. 3d. due to the fact that $16\frac{3}{4}$ equals only 16.750, whereas the correct figure is 16.777. The difference between these two is .027, and this multiplied by 132 gives 3.564, the difference between the two answers.

Half the rent for 51 periods at $1\frac{1}{4}$ per cent. gives 33.55401 × 66 = £,2214.56466.

(2) Find the present value of an annuity of ± 80 to run for 65 years certain such that the purchaser will obtain interest at $4^{\circ}/_{\circ}$.

1 per annum for 65 years = £23.047 | 90
80 ,, ,, = 23.047 × 80 =
$$1843.760$$
 | 90
or $23 \times 80 = £1840$ | 90

The explanation of the difference between the two answers is given under example (1).

Such transactions as these two imply that if the purchaser drew interest on his capital at the rate assumed and invested the balance of the annuity at compound interest, this balance at the end of the term would amount to the purchase price

and so replace the capital invested. Thus, to take the last example:—

The annual income = £80.000 4 $^{\circ}$ / $_{\circ}$ on price £1843.760 = 73.750

The annual balance = £6.250

£6.250 per annum accumulated for 65 years

 $=6.50 \times 504.968 = £1843.520$

See p.

102

102

This amount agrees closely with the value found, and would agree exactly if more places of decimals were used in the calculation.

(3) Find the present value of a perpetual income of £25 per annum to commence 30 years hence so that the investment may yield 5%.

Value of reversion to a perpetuity of $\pounds I = \pounds_{4.628}$,, ,, $\pounds_{25} = 4.628 \times 25 = I15.700$ or $25 \times 4\frac{3}{4} = \pounds I18 I5s$.

The difference between the answers is explained under example (1).

The nature of reversions is explained on p. 14.

Amount of a Sum in Any Number of Years

(4) Find the amount of £437 at the end of 35 years at 21 %.

1 in 35 years =
$$2.17879$$
 | 116
437 in 35 years = $2.17879 \times 437 = £952.13123$

or

$$\log 437 = 2.640481$$

$$\log 1.0225^{35} = 0.338216$$

 $\log (437 \times 1.0225^{35}) = 2.978697 = £952.13$

338 379

(5) Required, the amount of £625 in 127 years at $4\frac{1}{2}$ %.

1 in 100 years = 81.58852 | 135 1 in 27 ,, = 3.28201 | 134

1 in 127 years = 81.58852×3.28201 = 267.77434625 ,, 127 ,, = 267.77434×625 = £167358.96250

or	See p
log 625=2·795 880	346
log 1.045 ²⁷ =0.516 140	375
log 1.045 ¹⁰⁰ =1.011 629	411
$\log (625 \times 1.045^{127}) = 5.223 649 = \log 167359$	328
(6) Find the amount of £475 in 30 years at $2\frac{7}{10} = 2.7 \%$.	
log 475=2·676 694	340
log 1.027 ³⁰ =0.011570×30=0.347 100	327
log $(475 \times 1.027^{30}) = 3.023 794 = \log 1056.3$	327
1 in 30 years at $2.75 \% = 2.25660$	120
1, ,, 2.5 % = 2.09757	118
Difference = $0.15903 \div 5 = 0.03181$	
1 in 30 yrs. at 2.7 = 2.25660 - 0.03181 = 2.22479	
475 in 30 years = $2 \cdot 22479 \times 475$ = £1056.78 approximately	
(7) Find the rate of interest at which £530 must be invested in order to amount to £3,000 in 80 years.	
If 530 amounts to 3,000	
1 ,, $\frac{3,000}{530} = 5.66038$	
This is between 2 % and $2\frac{1}{4}$ %, but nearer $2\frac{1}{4}$ %.	115
or	117
log 3,000 = 3.477121	334
log 530 = 2·724276	342
$\log (1+i)^{80} = 0.752845$ $\log (1+i) = 0.752845 \div 80 = 0.009411 = \log 1.0219$ The rate of interest therefore is 2.19 %.	326
or	
from p. 401 it is seen to be nearer $2\frac{1}{4}$ than $2\frac{1}{8}$ per cent.	
(419)	

Present Value of a Sum to be Received in the Future

in the Future	
(8) It is required to know the present value of £913 to be received at the end of 37 years, reckoning interest at 4%.	See
Present value of 1 in 37 years = •2343	130
$,, ,, 913 = .23430 \times 913 = £213.9159$	
or	
log 913=2·960471	358
co-log 1·04 ³⁷ = 1·369766	380
$\log 913 \ v^{37} = 2 \cdot 330237 = \log £213 \cdot 91$	331
(9) At the end of 20 years an institution will enter into possession of a property which, it is agreed, will then be worth £5,000. Meantime it receives no income, but must spend £100 upon the property at the end of 5 years, £100 in 10 years, and £100 in 15 years. Find the present value of the property, reckoning interest at 3 %. Present value of 5,000 in 20 years = .55368 × 5000 = 2768.4 """ """ """ """ """ """ """ """ """	122
,, property according to conditions = $\pounds 2543.5$	
(10) Find the present value of £1,000 due at the end of 120 years at $2\frac{1}{2}\%$.	
P.V. of 1,000 due in 100 years = 84.65 , 84.65 , 20 , $= 84.65 \times .61027 = £51.659$ or	119
$\log 1000 = 3.000 000$ $\log 1.025^{12} = 0.128 6864$ $\log 1.025^{120} = 0.128 6864 \times 10 = 1.286 864$	367

 $\log 1000 r^{120} = 1.713 136 = \log 51.66$ 343

(420)

Amount of £1 per Annum	
(11) Find the amount of £93 per annum in 27 years at $3\frac{1}{2}\%$.	See p.
Amount of £1 per annum in 27 years = £ 43.75906 £93= 43.75906×93 = £ 4069.59258	126
or $\log 93 = 1.968483$ $\log (1+i)^{27} = 0.4033894$	358 37 5
$\operatorname{co-log} \frac{1}{a_{\overline{27}}} = 1 \cdot 2376785$	375
$\log 93 s_{\overline{27} } = 3.609551 = \log £4069.59$	339
(12) Find the amount of £735 per annum in 34 years at $2\frac{7}{8}$ %.	
$\log 735 = 2.866 \ 2873$ $\log (1+i)^{34} = 0.418 \ 5348$	378
$\operatorname{co-log} \frac{1}{a_{\overline{3}1}} = 1.332 7200$	378
$\log 735 s_{\overline{84}} = 4.617 5421 = \log £41451.68$	
or \mathcal{L}_{1} per annum at $3^{\circ}/_{\circ} = 57.73018$ \mathcal{L}_{1} per annum at $2\frac{3}{4}^{\circ}/_{\circ} = 55.10023$	I22 I20
Difference = 2.62995	
£1 p.a. at $2\frac{3}{4} + \frac{1}{2}$ diff. = $55 \cdot 10023 + 1 \cdot 31497 = 56 \cdot 41520$ £735 at $2\frac{7}{8}$ % = $56 \cdot 4152 \times 735$ = £41465 roughly.	
The error here is considerable. Taking half the difference between $2\frac{3}{4}$ and $3\frac{9}{0}$ to obtain $2\frac{7}{8}\frac{9}{0}$ is only a means of roughly approximating to the correct amount.	
Present Value of Annuity	
(13) Find the present value of £47.25 per annum for 30 years at 5 %.	
P.V. of £1 per annum = 15.37245 ,, £47.25 per annum = $15.37245 \times 47.25 = £726.348$	138
or log 47·25 = 1·674 402	341
$-\log \frac{\mathbf{i}}{a_{30}^{-}} = \overline{2} \cdot 813 \ 257$	376
$\log 47.25a_{\text{rel}} = 2.861 145 = \log 726.35$	350

(421)

(14) Find the value of a lease yielding £,137 per annum for 27 years to make 3 % and to get back the principal by the end of the term. See p. £1 p.a. for 27 years = £18.32703 or 18.32703 yrs. purchase 122 $= 18.32703 \times 137 = £2510.8$ £137 log 137 = 2·136721 or $-\log \frac{1}{a_{z_{1}}} = \frac{2 \cdot 736908}{2 \cdot 3399813} = \log £2510 \cdot 8$ 375 (15) A tenant holds same property under a lease that has 2 years to run. It is agreed that 2 years hence it can be renewed for 19 years at an increase of £500 a year. What is the equivalent rent for 21 years from now? Let R be the rent. Then the present value of R per annum for 21 years must be equal to the value 2 years hence of £500 per annum for 19 years. That is— $Ra_{\bar{z}_1} = v^2 \times 500a_{\bar{z}_0}$ $R = \frac{500v^2a_{19}}{a_{19}}$ At 5 °/o per annum- $R = \frac{500 \times '90703 \times 12'08532}{12'82115}$ $R = \frac{5480'8739}{12'82115} = 427'487$ 138 The tenant pays 427.487 per annum, which amounts to $427.487 \times 2.05 = 876.348$ 138 He saves (500 - 427.487 =) 72.513 per annum for 19 years, the present value of which 2 years hence will be $72.513 \times 12.08532 = 876.343$ 138 This checks the result. (16) If leasehold property yielding a net annual income of £100 a year for 30 years is bought for £2,000, find the yield per cent. If £100 per annum costs £2,000, £1 per annum costs £200. This is seen to be between $2\frac{3}{4}$ and 3%120 $\log a_{30} = \log 20 = 1.301 0300$ 122 or $\log \frac{1}{a_{rol}} = \overline{2} \cdot 698 9700$ $\log \frac{1}{a} = \overline{2}.693$ 5900 at 2.75 % 376

factor 17.61 × 0.005 3800 = .0947

Rate per cent. = 2.8447

(17) Find the present value of £1 per annum for 75 years at 3.7%.	
log 1.037 = 0.0157 7876	
75 log 1·037 = 1·1834 0700	
co-log $1.037^{75} = \log v^{75} = 2.8165$ 930 = log $.06555306$	
7 775 +02444604	
$a_{75} = \frac{1 - v^{75}}{i} = \frac{.93444694}{.037} = 25.2553$	
<i>i</i> • • • • • • • • • • • • • • • • • • •	
Present Value of a Perpetuity	
(18) Find the value of a perpetuity of £60 a year, reckoning	
interest at $3\frac{3}{8}\%$.	Cond
	See p.
29·62963 × 60 = 1777·7778	206
	416
(19) Find the value of a property yielding £25 per annum	
for the next 15 years and £110 in perpetuity thereafter,	
reckoning interest at 3 %.	
Take the value of a perpetuity of £110 per annum and	
deduct the value of $(110-25=)$ £85 per annum for 15 years.	
	206
Perpetuity = $33 \cdot 3 \times 110 = 3666 \cdot 666$	
P.V. of $£85$ p.a. for 15 years = 11.93794 $\times 85$ = 1014.725	122
77.1	
Value required = $£2651.941$	
or	
P.V. of £25 p.a. for 15 years = $11.93794 \times 25 = 298.448$	122
P.V. of perpetuity £110 deferred 15 years	
$=21.39539 \times 110 = 2353.493$	167
	,
Value required = £2651.941	
7 32031 941	
(20) Find the value of the reversion to a perpetuity of £496	
per annum after 22 years at $2\frac{5}{8}\%$.	
Value of perpetuity of £1 at $2\frac{5}{8}\% = 38.09524$	206
P.V. of £1 p.a. for 22 years at $2\frac{1}{2}$ % = 16.76541	118
,, ,, ,, $^{2\frac{3}{4}}$ $^{0}/_{0} = 16 \cdot 34350$	120
Difference = '42191	
P.V. at $2\frac{5}{8}$ % (= 16·34350 + ·21095) = 16·55445	
Approximate P.V. of perpetuity of £1 p.a. at	
$2^{\frac{5}{8}} \%$ deferred 22 years = 21.54079	
Approximate P.V. of perpetuity of £496 p.a.	
at $2\frac{5}{8}$ % deferred 22 years = 21.54079 × 496 = £10684	
(423)	
14431	

 $\log 496 = 2.695 4817$ or $-\log i = 2.419$ 1293 414 $\log \frac{476}{3} = 4.276 \ 3524 = \log 18895.24$ $\log \frac{1}{a_{mi}} = \overline{2} \cdot 781 \quad 1365$ 372 $\log 496 - \log \frac{\bar{I}}{a_{\tilde{g}01}} = 3.914 \ 3452 = \log \ 8210.04$ Value of reversion = 10685.20 Sinking Fund (21) Find the sum to be set aside annually to amount to £750 in 30 years, reckoning interest at 4 %. The sum to amount to $f_{i}I =$ £.01783 182 $£750 = .01783 \times 750 = £13.3725 \text{ p.a.}$ log 750 = 2.875061 or $\log \frac{1}{a_{\overline{20}}} = \overline{2.762154}$ 376 $\log \frac{750}{a_{\text{rel}}} = 1.637215 = \log 43.373$ Deduct 4 % on $750 = .04 \times 750 =$

Annuity a Given Sum will Purchase

Annual sum to amount to £750 in 30 years =

(22) Find the annuity for 35 years that may be bought for $\pounds_{1,573}$, reckoning interest at $3\frac{1}{2}\%$.

$$\log 1573 = 3 \cdot 196729$$

$$\log \frac{1}{a_{\overline{35}}} = 2 \cdot 698956$$
379

126

$$\log \frac{1573}{a_{351}^{-}} = 1.895685 = \log £78.6475$$
20.00066 will buy an annuity of £1 p.a.

1573 will buy an annuity of $\frac{1573}{20.00066} = £78.6474$

or

Annuities and Assurances on Lives

(23) Find the value of an annuity of £250 on the life of a male aged 45, according to the Government Experience Table at 3 %.

See p. 274

(24) Find the value of £1,500 to be received at the death of a male aged 50, according to the Healthy Males Table at $3\frac{1}{2}\%$ $\cdot 52023 \times 1500 = £780 \cdot 345$

282

(25) Find the annual payment to secure £1,500 at the death of a male aged 50, according to the Healthy Males Table at

> ·03667 × 1500 = £55·005 286

(26) Find the value of the reversion to a perpetuity of £,100 per annum at the death of a male aged 60, according to the Government Experience Table at 3 %, and according to the Healthy Males Table at 3 %.

290

By Government Experience $22.732 \times 100 = £2273.2$

By Healthy Males-

Value of a perpetuity of 100 = 3333'3 ,, 100 p.a. for life = 1023.6

206 273

deferred perpetuity = £2309.7

40

(27) Find value of annuity of £,135 so long as two female lives, aged 25 and 45, both continue to live. Government Table 3 %.

296

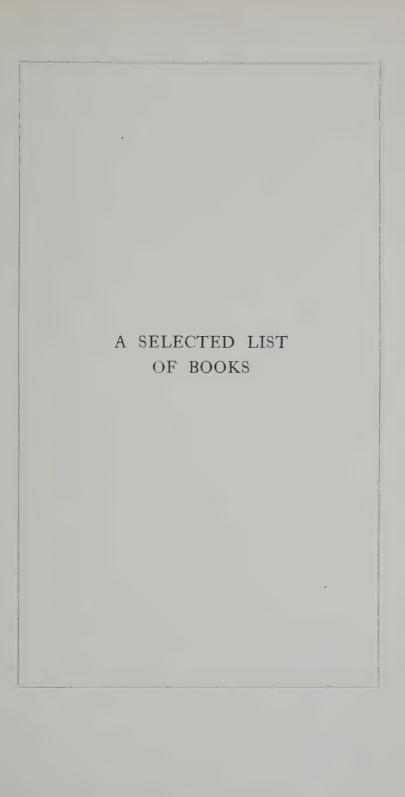
- $14.650 \times 135 = £1977.75$
- (28) Find value of annuity of £,250 so long as either of two male lives, aged 30 and 50, continue to live. Healthy Males Table 31 %.

$$19.7251 \times 250 = £4931.275$$

$$(425)$$

311

(29) Find the single payment to secure £1,250 (a) at the death of the first and (b) at the death of the last of two male lives, aged 45 and 60. Healthy Males Table 4 %.	See p.
(a) At death of first $\cdot 64328 \times 1250 = £804 \cdot 1$	307
(b) ,, ,, last $\cdot 3814 \times 1250 = £476.75$	314
Single and Annual Premiums by Conversion Tables	
(30) Find the single payment to secure £1,000 at death of a person aged 43. Northampton Table 3 %.	
Annuity on life aged 43 = 14·162 Single payment for annuity of 14 = '56311 "	268 323 323 323 323 323
Single payment to secure 1,000 = £558·39 or	47-50
1000 $[1029126 (14.162 + 1)] = £558.3916$	47-50
(31) Find the annual payment to secure £1,000 at the death of a person aged 43. Carlisle Table 4 %.	
Annuity on life aged $43 = 14.505$ Annual premium for annuity of $14.5 = .03540093 = .0261$,, ,, $£_{1,000}$ at death $= £_{26.1}$.	270 324
$1000 \left(\frac{1}{14.505 + 1}03846 \right) = 64.50 - 38.46 = £26.04$	47- 50



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